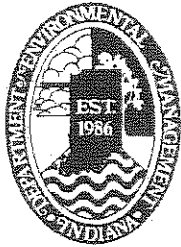


B.I.1



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

RECEIVED
AUG 4 - 1988

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

August 1, 1988

VIA CERTIFIED MAIL - P 652 575 225

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Mr. William E. Laque
Environmental Coordinator
Rock Island Refinery
5000 West 86th Street
Indianapolis, Indiana 46268

Re: Part B Permit Application
Rock Island Refinery
Indianapolis, Indiana
IND 006417430

Dear Mr. Laque:

Under the authorities of Indiana Rule 329 IAC 3-34-1 and 40 CFR 270.10, this is a formal request for submittal of an updated, amended Part B of the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit Application for Rock Island Refinery. The revised application must incorporate all responses to previous Notice of Deficiency comments and any changes pursuant to the new tank regulations.

A RCRA Permit Application consists of two (2) parts, a Part A and a Part B. The Part A consists of the form your company submitted on November 18, 1980 and amended on February 27, 1985 to the U.S. Environmental Protection Agency (U.S. EPA). The Part A allowed your company to obtain "interim status," and to continue to operate the following hazardous waste management activities: tank treatment, T01 (3,456,000 gallons/day), tank storage, S02 (6,000 gallons, and tank treatment T01 (1,640 gallons per day). On January 31, 1986, the Indiana Department of Environmental Management (IDEM) was authorized to implement the RCRA Program in lieu of the U.S. EPA. On November 18, 1980, Rock Island submitted their original Part B Application. The next step in the permitting process is for your company to submit the updated, amended Part B Permit Application to the IDEM and the U.S. EPA.

If your company has acted as a treatment, storage, or disposal facility (TSD) of hazardous waste at any time after November 19, 1980, and does not wish to continue to do so, then a closure plan must be submitted in lieu of the Part B Permit Application. The plan must be prepared in accordance with 329 IAC 3-21.

Mr. William E. Laque
Page 2

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (HSWA) were signed into law. This law amended RCRA, and contains additional provisions which may affect your company. The State of Indiana has not yet been authorized to administer the hazardous waste permit requirements of HSWA. Therefore, the final permit will contain a State portion prepared by the IDEM and a federal HSWA portion prepared by the U.S. EPA. One important HSWA provision mandates that interim status shall terminate unless the Part B Permit Application is submitted for a determination regarding issuance of a final permit. Another provision requires corrective action for all releases of hazardous wastes or constituents from any solid waste management unit at a TSD facility seeking a permit, regardless of the time at which waste was placed in the unit. The U.S. EPA will address these and other applicable provisions of HSWA during the permit review process.

Eight (8) copies of the application must be submitted and postmarked no later than one hundred eighty (180) days after the date of receipt of this letter. The original and six (6) copies of the application must be sent to:

Mr. Thomas E. Linson, Chief
Plan Review and Permit Section
Office of Solid and Hazardous Waste Management
Indiana Department of Environmental Management
105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015

The other two (2) copies must be sent to:

RCRA Activities
Part B Permit Application
U. S. Environmental Protection Agency
Region V
P.O. Box A3587
Chicago, Illinois 60690-3587

Attention: Mr. Hak Cho, Chief, Indiana Section

Please uniquely number each page of the application including all attachments (maps, specifications, etc.). A certification statement identical to the one stated in 329 IAC 3-34-2(d) and 40 CFR 270.11(d) must accompany each application and all additional submittals.

Information submitted in the Part B Permit Application to the U.S. EPA can be disclosed to the public, according to the Freedom of Information Act and U.S. EPA Freedom of Information regulations. Information submitted to the IDEM can be disclosed to the public according to Indiana's Public Records Law, IC 5-14-3. If you wish, however, you may assert a claim of business confidentiality by printing the word "confidential" on each page of the application that you believe contains confidential business information. All

Mr. William E. Laque
Page 3

incoming materials containing confidential information must be sent in a double envelope--one envelope inside the other. The inner envelope is to be addressed to the Docket Control Officer (DCO) with the following instructions: "To be opened only by the DCO."

The IDEM and the U.S. EPA will review business confidentiality claims under 320 IAC 6-1 (enclosed) and 40 CFR Part 2, respectively, and may later request substantiation of such claims. Please review these rules carefully before making a claim. If you claim parts of your application as confidential, also provide a public information copy of the application. The public information copy must be identical to the full application excluding the confidential information.

A copy of our "Part B Completeness Checklist" is enclosed; it will assist you in preparing a comprehensive and complete permit application.

The IDEM and the U.S. EPA are committed to jointly conducting the permitting process as efficiently as possible, and will strive for the simultaneous issuance of the federal and State portions of the final RCRA permit. I suggest you contact Ms. Linda Bobo of this office at AC 317/232-3292 as you begin preparing your application.

Sincerely,



Jane Magee
Assistant Commissioner for
Solid and Hazardous Waste Management

LB/rmw

Enclosures: Part B Completeness Checklist

cc: Marion County Health Department
Mr. Hak Cho, U.S. EPA, Region V
Mr. Bernie Orenstein, U.S. EPA, Region V



ROCK ISLAND REFINING

Corporation

February 13, 1986

Mr. David A. Stringham
Chief, Solid Waste Branch
United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604

RECEIVED

FEB 18 1986

SOLID WASTE BRANCH
U.S. EPA, REGION V

RE: Hazardous Waste Permit Application
(5HS-JCK-13)

Dear Mr. Stringham:

We were indeed perplexed when we received your letter of January 16, 1986, with attached Certification Regarding Potential Releases From Solid Waste Management Units (hereafter "Certification Form"), requesting Rock Island Refining Corporation to complete the enclosed Certification Form since as an identical Certification Form and request had been submitted to Rock Island by letter of May 3, 1985, from Karl J. Klepitsch, Jr., Chief, Solid Waste Branch, Region V.

On May 9, 1985, Rock Island requested Edith Ardiente, Chief, Technical Programs Section, Region V, for an extension of time in which to complete and otherwise respond to the Certification Form. In her letter of June 13, 1985, Ms. Ardiente reported to William E. Laque, Coordinator of Environmental Affairs, that Rock Island was being granted an extension of time until June 17, 1985, in which to complete its response to the Certification Form.

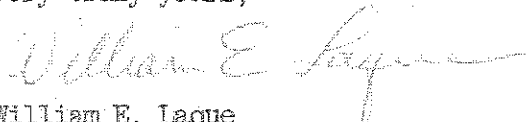
Rock Island has timely responded in this matter, having filed the completed Certification Form with EPA on June 17, 1985. Rock Island is providing to EPA another copy of the Certification Form and cover letter of June 17, 1985. The June 17 submission is attached as Exhibit A.

ROCK ISLAND REFINING CORP.

Mr. David A. Stringham
February 13, 1986
Page 2

Please call George W. Pendygraft, Esq., (317/264-1784), Baker & Daniels, Indianapolis, Indiana, or the undersigned if you have any questions or need of additional information with respect to this matter.

Very truly yours,



William E. Laque
Coordinator, Environmental Affairs

WEL:jw

attachment

COPY



ROCK ISLAND REFINING

Corporation

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 17, 1985

Ms. Edith M. Ardiente, P.E.
Chief, Technical Programs Section
U.S. EPA, Region V
RCRA Activities
P. O. Box A3587
Chicago, Illinois 60604

Re: Corrective Action Requirements,
Hazardous and Solid Waste Amendments of 1984
(5HS-12)

Dear Ms. Ardiente:

Enclosed is a signed copy of the Certification Regarding Potential Releases from Solid Waste Management Units at the Rock Island Refining Corporation (IND 006417430), Indianapolis, Indiana. It is Rock Island's belief that there are no releases of hazardous waste or constituents from any solid waste management units at the refinery and thus no corrective actions are required.

Rock Island has submitted its Part B permit application for the hazardous waste activities at the refinery and is presently preparing responses to a Notice of Deficiency issued by Region V. Rock Island believes that the enclosed Certification must be considered in light of not only the Part B application but also the EPA's Notice of Deficiency and Rock Island's anticipated responses to that Notice of Deficiency. For example, it is Rock Island's belief that the "informal delisting" issued in March, 1982, has the effect of precluding any enforcement action the EPA might initiate regarding wastes included in such informal delisting. Because of the uncertainty created by the status of Rock Island's Part B permit application, Rock Island reserves the right to

ROCK ISLAND MILLING CORP.

Ms. Edith M. Ardiente, P.E.


-2-

June 17, 1985

supplement or amend the enclosed Certification should that prove to be appropriate at a later date.

Please call the undersigned if there are questions concerning the enclosed Certification.

Very truly yours,



William E. Laque
Environmental Coordinator

WEL:kjr

cc Roy Wogelius
George W. Pendygraft, Esq. ✓

**CERTIFICATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS**

FACILITY NAME: Rock Island Refining Corp.
 EPA I.D. NUMBER: IND 006417430
 LOCATION CITY: Indianapolis (5000 West 86th Street)
 STATE: Indiana (46268-1601)

1. Are there any of the following solid waste management units (existing or closed) at your facility? - NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

	<u>YES</u>	<u>NO</u>
• Landfill	<u>X</u>	<u> </u>
• Surface Impoundment	<u>X</u>	<u> </u>
• Land Farm	<u>X</u>	<u> </u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X *</u>
• Storage Tank (Above Ground)	<u> </u>	<u>X *</u>
• Storage Tank (Underground)	<u> </u>	<u>X *</u>
• Container Storage Area	<u> </u>	<u>X *</u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u>X</u>	<u> </u>
• Transfer Stations	<u> </u>	<u>X</u>
• Waste Recycling Operations	<u> </u>	<u>X *</u>
• Waste Treatment, Detoxification	<u>X</u>	<u> </u>
• Other <u>Staging area</u>	<u>X</u>	<u> </u>

*Such units exist at refinery but are not solid waste management units.

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed on and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

Refer to Addendum 1

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information

- a. Date of release
- b. Type of waste released
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

a. July 23, 1980

b. Oil

c. 40,000-gallons

d. Overflow of east sediment and water pond (no longer in existence) during very heavy rains into run-off system and and out NPDES 003 outfall.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

The only analyses that exist are for the sludge in the

sediment and water pond. Those data are attached as

Addendum 2. The overflow was cleaned up to the satisfaction

of all agencies involved (U.S. EPA and State of Indiana).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

William E. Laque, Environmental Coordinator

Typed Name and Title

William E. Laque
Signature

June 17, 1985
Date

ADDENDUM 1

Item		Description of Waste	RCRA Hazardous Waste	Approximate Quantities/ Volumes of Waste	Date of Disposal	Capacity	Dimensions/Area	Location at Facility
Landfill	1. Asphalt	Very heavy Oil with Pine	No	250-300 yds ³	1950's	300 yds ³	1 acre	Northwest corner of refinery (Reported on Part A)
	2. Concrete, Debris	Concrete debris from Demolition	No	Unknown	Unknown — 1980	Unknown	3 acres	Refinery property south of State Rd 100 (Reported on Part A)
Surface Impoundment	1. East	Sediments and water ponds	No	5300 yds ³		5500 yds ³	23,100 ft ² x 6 ft	Tank farm area of refinery (Reported on Part A)
	2. West	Sediments and water ponds	No	3800 yds ³		3750 yds ³	16,438 ft ² x 6 ft	Tank farm area of refinery (Reported on Part A)
Land Farm		One-time farming of sediments and water	No	6000 yds ³	1981-1982	greater than 8000 yds ³	30 acres	Refinery tank farm (Reported on Part A)
Waste Pile		Not applicable						
Incineration		Not applicable						
Storage Tank (above ground)		Not applicable						
Storage Tank (underground)		Not applicable						
Container Storage		Not applicable						
Injection Wells		None						
Waste Water Treatment Units	Aeration ponds, 6 ponds in series	Wastewaters	No	4.6x10 ⁶ gal		4.6x10 ⁶ gal	#1 70'x90'x6' #2 70'x90'x6' #3 132'x170'x6' #4 132'x90'x6' #5 124'x90'x6' #6 Trapezoid 180', 251', 261'x6'	western side of tank farm area (Reported on Part A)
Waste Recycling Operations		Not applicable						
Transfer Stations		None						
Waste Treatment (Detoxification)		Tetra Ethyl Lead Contaminated material	No	Unknown	Prior to 1980		10 acres	north end of tank farm
Other (staging area)		Vacuum filter cake	No	60 yd ³		Unknown	30' x 30'	Tank farm area of refinery

EMS Laboratories Company

7901 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 27, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17834

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION DRINKING WATER

WASTE WATER

Sludge OTHER

BILL TO:

COLLECTED BY DATE SAMPLED

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
East B S & W Lagoon - Sample analyzed on as received basis				
pH	7.8	8-26	G. Klingler	Electrode method
% Oil	Appx. 10 %	8-26	G. Klingler	
Cyanide	< 1	8-15	D. McConnaha	Distillation + barbituric acid colorimetric
Phenols	8.8	8-26	C. Mueller	Colorimetric 4AAP
Total Kjeldahl Nitrogen	855	8-18	M. Bidwell	Digestion + distillation
Chloride on filtered H ₂ O	199	8-26	M. Bidwell	Mercuric nitrate
Sulfate on filtered H ₂ O	288	8-26	C. Mueller	Turbidimetric
Cadmium	< 1.1	8-18	T. Jones	Atomic absorption
Nickel	7	8-18	T. Jones	Atomic absorption
Copper	43	8-18	T. Jones	Atomic absorption
Chromium	232	8-18	T. Jones	Atomic absorption
Zinc	122	8-18	T. Jones	Atomic absorption
Lead	41	8-18	T. Jones	Atomic absorption
Silver	1.3	8-18	T. Jones	Atomic absorption
Aluminum	902	8-18	T. Jones	Atomic absorption
Mercury	0.0051	8-19	T. Jones	Flameless atomic absorpti
Arsenic	< 57	8-25	T. Jones	Flameless atomic absorpti
Selenium	205	8-26	T. Jones	Flameless atomic absorpti
Barium	28	8-18	T. Jones	Atomic absorption
Vanadium	< 10	8-18	T. Jones	Atomic absorption
Sulfide	< 5	8-26	G. Klingler	Titrimetric-iodine
Sample Prep				

REMARKS:

DATA REVIEWED BY:

C. STEVEN GOHM

EMS 1 1 rles Company

7901 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 27, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17835

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bil Laque

SAMPLE DESCRIPTION DRINKING WATER
WASTE WATER
Sludge OTHER

BILL TO:

COLLECTED BY DATE SAMPLED

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
West B S & W Lagoon - Sample analyzed on as received basis				
pH	8.0	8-26	G. Klingler	Electrode method
% Oil	Appx. 20 % by volume	8-26	G. Klingler	
Cyanide	9 ug/gr	8-15	D. McConnaha	Distillation + barbituric acid colorimetric
Phenols	8.5 ug/gr	8-26	C. Mueller	Colorimetric 4AAP
Total Kjeldahl Nitrogen	1191 ug/gr	8-18	M. Bidwell	Digestion + distillation
Chloride on filtered H ₂ O	128 ug/gr	8-20	C. Mueller	Mercuric nitrate
Sulfate on filtered H ₂ O	20 ug/gr	8-22	C. Mueller	Turbidimetric
Cadmium	1.4 ug/gr	8-18	T. Jones	Atomic absorption
Nickel	22 ug/gr	8-18	T. Jones	Atomic absorption
Copper	134 ug/gr	8-18	T. Jones	Atomic absorption
Chromium	255 ug/gr	8-18	T. Jones	Atomic absorption
Zinc	516 ug/gr	8-18	T. Jones	Atomic absorption
Lead	80 ug/gr	8-18	T. Jones	Atomic absorption
Silver	0.3 ug/gr	8-18	T. Jones	Atomic absorption
Aluminum	1600 ug/gr	8-18	T. Jones	Atomic absorption
Mercury	< 0.06 ug/gr	8-22	T. Jones	Flameless atomic absorpti
Arsenic	< 27 ug/gr	8-25	T. Jones	Flameless atomic absorpti
Selenium	< 51 ug/gr	8-25	T. Jones	Flameless atomic absorpti
Barium	142 ug/gr	8-18	T. Jones	Atomic absorption
Vanadium	< 10 ug/gr	8-18	T. Jones	Atomic absorption
Sulfide	< 5 ug/gr	8-21	G. Klingler	Titrimetric-iodine
Sample Prep charge				

REMARKS:

DATA REVIEWED BY:

C. STEVEN GOHMA

EMS Laboratories Company

7801 West
P.O. Box 413/1
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE September 22, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17833 - 834

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268

SAMPLE DESCRIPTION DRINKING WATER
WASTE WATER
Sludge OTHER

BILL TO:

Attn; Bill Laque

COLLECTED BY DATE SAMPLED

DELIVERY
TICKET

No. 6033

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
<u>#17833 - West Lagoon</u>					
Total Solids	28 %	9-19	C. Burton	Gravimetric	\$ 16.50
<u>#17834 - East Lagoon</u>					
Total Solids	31 %	9-19-80	C. Burton	Gravimetric	16.50

*Note - Because of the difficulty in obtaining a representative sample, EMS Laboratories, Inc. makes no warranty except that the analysis has been made, and a report prepared, based upon the samples obtained. Any extrapolation of data from the samples relating to the batch or lot from which it was obtained may not correlate and should be interpreted accordingly with extreme caution.

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY:

[Signature]

\$33.00

C. STEVEN GOHMANN

EMS Laboratories Company

7801 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 26, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17835 -17836

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE DESCRIPTION DRINKING WATER

WASTE WATER

Leachate

OTHER

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268

BILL TO:

Attn: Bill Laque

COLLECTED BY _____ DATE SAMPLED _____


Analyses performed according to 40 CFR 261

PARAMETER	RESULTS		DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
<u>#17835 - West 17833</u>					
Cadmium	0.02	mg/l	8-25	T. Jones	Atomic absorption
Chromium	0.13	mg/l	8-25	T. Jones	Atomic absorption
Lead	< 0.2	mg/l	8-25	T. Jones	Atomic absorption
Silver	< 0.01	mg/l	8-25	T. Jones	Atomic absorption
Mercury	< 0.0005	mg/l	8-25	T. Jones	Flameless atomic absorpti
Arsenic	< 0.5	mg/l	8-25	T. Jones	Flameless atomic absorpti
Barium	0.8	mg/l	8-25	T. Jones	Atomic absorption
Leachate Prep charge					
Selenium	< 0.5	mg/l	8-25	T. Jones	Flameless atomic absorpti
<u>#17836 - East 17834</u>					
Cadmium	< 0.01	mg/l	8-25	T. Jones	Atomic absorption
Chromium	< 0.01	mg/l	8-25	T. Jones	Atomic absorption
Lead	< 0.2	mg/l	8-25	T. Jones	Atomic absorption
Silver	< 0.01	mg/l	8-25	T. Jones	Atomic absorption
Mercury	< 0.0005	mg/l	8-25	T. Jones	Flameless atomic absorpti
Arsenic	< 0.5	mg/l	8-25	T. Jones	Flameless atomic absorpti
Selenium	< 0.5	mg/l	8-25	T. Jones	Flameless atomic absorpti
Barium	< 0.1	mg/l	8-25	T. Jones	Atomic absorption
Leachate Prep Charge					

*Note - Sample analyzed on as received basis.

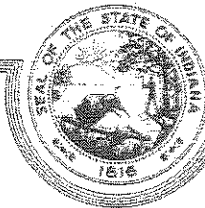
REMARKS:

DATA REVIEWED BY:



C. STEVEN GOHMANN
REPORT COPY

STATE OF INDIANA



INDIANAPOLIS

STATE BOARD OF HEALTH
AN EQUAL OPPORTUNITY EMPLOYER

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206-1964

RECEIVED

July 31, 1985

AUG 05 1985

SOLID WASTE BRANCH
U.S. EPA, REGION V

Ms. Edith Ardiente, Chief
Technical Programs Section
Solid Waste Branch (5HS-13)
U.S. EPA, Region V
230 South Dearborn Street
Chicago, IL 60604

Dear Ms. Ardiente:

Re: Part B Permit Application
Completeness Review
Rock Island Refining Corporation
Indianapolis, Indiana
IND 006417430

The Plan Review and Permit Section has concluded the completeness check portion of the Part B permit application from Rock Island Refining Corporation.

The completeness review was started on July 19, 1985, and concluded on July 24, 1985. A total of 24 hours was spent reviewing the application.

Additional information is required from the applicant before a technical review can be initiated. Therefore, we recommend that the enclosed Notice of Deficiency (NOD) be issued to the applicant and that further evaluation be deferred until the applicant responds to the NOD.

The facility's application reflects the "temporary exclusion" and "informal delisting" granted by the U.S. EPA on March 11, 1982, for waste codes K049, K050, and K051. Therefore, none of the facility's hazardous waste units handling these waste codes are provided for the revised Part A or Part B permit application.

The items found deficient in the permit are noted in the attached Notice of Deficiency. The number of each deficiency noted corresponds to the number listed in the enclosed initial May 16, 1985, Notice of Deficiency to Rock Island Refining Corporation prepared by Mr. Roy Wogelius of your staff.

-2-

Please refer all questions regarding the completeness review to the State Permit Writer, Ms. Cynthia Hall, at AC 317/243-5093.

Very truly yours,

Terry F. Gray

Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Division of Land Pollution Control

CBH/tr

Enclosures

cc: Mr. Kenneth Burch, U.S. EPA, Region V

Rock Island Refining Corporation
IND 006417430
Second Completeness Review
Notice of Deficiency

Item IV. Part A Deficiencies.

1. -- The land application area, listed in the Refinery's original Part A dated November 18, 1985, was not addressed on the revised Part A.
 - The basic sediment and water ponds (T02) were not addressed.
 - The aeration lagoons (T02) were not addressed.
2. Topographic Map
 - A revised topographic map was not provided.
 - Photographs of the facility legibly showing structures, hazardous waste units, etc., were not provided.
 - The process codes and design capacities section (Form 3.III.B.) were not provided.

Item V. Part B Requirements.

2. -- Waste Analysis Plan. The revised plan did not address the frequency of analysis or describe the sampling procedure. However, the original Part B references that the sampling and analyses are conducted according to 40 CFR 261 and 264.
4. General Inspection Schedule
 - The aeration lagoons, basic sediment and water ponds, and land application area were not included in the inspection schedule.
6. Contingency Plan
 - Documentation showing the qualifications and authority of those designated as emergency coordinators was not provided. A general statement of what is required of the coordinator was given. However, a resume, training record, etc., were not provided.
7. Detailed Emergency Procedures
 - A description of cleanup procedures and associated material testing, etc., was not provided.

8. Surface impoundment contingency plan requirements were not provided.
9. Preventive Procedures, Structures, and Equipment.
 - A description of the equipment and procedures to be used to prevent runoff and flooding were not provided.
 - A general description of the power failure policy for the facility was provided. However, shutdown procedures and instructions on how to transfer power or who to contact was not provided.
10. Traffic Patterns. A map documenting waste movement was provided; however, the quantity of waste per movement per vehicle was not given.
14. Closure plan requirements for the surface impoundments and land treatment area were not met.
15. Post-closure plan documentation was not provided for the land treatment area and surface impoundments.
16. Documentation that a notice has been placed on the facility's deed indicating that the land had been used to manage hazardous waste was not provided.
17. Post-closure cost estimates were not provided.
18. Documentation of insurance for non-sudden accidents was not provided.
19. A detailed topographic map containing all of the items required by 270.14(b)(19) was not provided.
20. Specific Part B requirements for the surface impoundments and the land treatment area were not provided.

JUL 12 1985

298-19

William Doyle, Chief
Division of Land Pollution Control
Hazardous Waste Management Branch
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

RE: Rock Island Refining Corporation
IWD 005517430

Dear Mr. Doyle:

Enclosed please find three (3) copies of the Rock Island Refining Corporation's response to the United States Environmental Protection Agency's (U.S. EPA) Notice of Deficiency (NOD) for that facility's Resource Conservation and Recovery Act (RCRA) Part B hazardous waste permit application dated May 16, 1984.

This material should be reviewed for completeness and either a second and final NOD will be issued or the application will be deemed complete. Your review of this information should be concluded within 30 days after the receipt of this letter.

Please contact Mr. Roy Legallius of my staff at (317) 625-1474, if you have any questions concerning this matter.

Sincerely yours,

INITIALS	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TRP CHIEF	WWB CHIEF	WWB DIRECTOR
	AC	RCW						
DATE	7/9/85	7/9/85				7/17/85		

298-19

COPY



ROCK ISLAND REFINING

Corporation

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RECEIVED

June 17, 1985

JUN 21 1985

Ms. Edith M. Ardiente, P.E.
Chief, Technical Programs Section
U.S. EPA, Region V
RCRA Activities
P. O. Box A3587
Chicago, Illinois 60604

SHS-AIS
U.S. EPA, REGION V

Re: Corrective Action Requirements,
Hazardous and Solid Waste Amendments of 1984
(SHS-12)

Dear Ms. Ardiente:

Enclosed is a signed copy of the Certification Regarding Potential Releases from Solid Waste Management Units at the Rock Island Refining Corporation (IND 006417430), Indianapolis, Indiana. It is Rock Island's belief that there are no releases of hazardous waste or constituents from any solid waste management units at the refinery and thus no corrective actions are required.

Rock Island has submitted its Part B permit application for the hazardous waste activities at the refinery and is presently preparing responses to a Notice of Deficiency issued by Region V. Rock Island believes that the enclosed Certification must be considered in light of not only the Part B application but also the EPA's Notice of Deficiency and Rock Island's anticipated responses to that Notice of Deficiency. For example, it is Rock Island's belief that the "informal delisting" issued in March, 1982, has the effect of precluding any enforcement action the EPA might initiate regarding wastes included in such informal delisting. Because of the uncertainty created by the status of Rock Island's Part B permit application, Rock Island reserves the right to

294-16

COPY 2

P.O. BOX 68007 • INDIANAPOLIS, INDIANA 46268 • (317) 872-3200

ROCK ISLAND REFINING CORP.

Ms. Edith M. Ardiente, P.E.

-2-

June 17, 1985

supplement or amend the enclosed Certification should that prove to be appropriate at a later date.

Please call the undersigned if there are questions concerning the enclosed Certification.

Very truly yours,



William E. Laque
Environmental Coordinator

WEL:kjr

cc Roy Wogelius
George W. Pendygraft, Esq.

ADDENDUM 1

Item		Description of Waste	RCRA Hazardous Waste	Approximate Quantities/Volume of Waste	Date of Disposal	Capacity	Dimensions/Area	Location at Facility
Landfill	1. Asphalt	Very heavy Oil with Fines	No	250-300 yds ³	1950's	300 yds ³	1 acre	Northwest corner of refinery (Reported on Part A)
	2. Concrete, Debris	Concrete debris from Demolition	No	Unknown	Unknown — 1980	Unknown	3 acres	Refinery property south of State Rd 100 (Reported on Part A)
Surface Impoundment	1. East	Sediments and water ponds	No	6300 yds ³		5500 yds ³	23,100 ft ² x 6 ft	Tank farm area of refinery (Reported on Part A)
	2. West	Sediments and water ponds	No	3600 yds ³		3750 yds ³	15,438 ft ² x 6 ft	Tank farm area of refinery (Reported on Part A)
Land Farm		One-time farming of sediments and water	No	4000 yds ³	1981-1982	greater than 8000 yds ³	30 acres	Refinery tank farm (Reported on Part A)
Waste Pile		Not applicable						
Incineration		Not applicable						
Storage Tank (above ground)		Not applicable						
Storage Tank (underground)		Not applicable						
Container Storage		Not applicable						
Injection Wells		None						
Waste Water Treatment Units	Aeration ponds, 6 ponds in series	Wastewaters	No	4.5x10 ⁶ gal		4.6x 10 ⁶ gal	#1 70'x90'x6' #2 70'x90'x6' #3 132'x170'x6' #4 132'x90'x6' #5 124'x90'x6' #6 Trapezoid 180', 251', 261'x6'	western side of tank farm area (Reported on Part A)
Waste Recycling Operations		Not applicable						
Transfer Stations		None						
Waste Treatment (Detoxification)		Tetra Ethyl Lead Contaminated material	No	Unknown	Prior to 1980		10 acres	north end of tank farm
Other (staging area)		Vacuum filter cake	No	60 yd ³		Unknown	30' x 30'	Tank farm area of refinery

CERTIFICATION REGARDING POTENTIAL RELEASE FROM
SOLID WASTE MANAGEMENT UNITS

FACILITY NAME: Rock Island Refining Corp.
 EPA I.D. NUMBER: IND 006417430
 LOCATION CITY: Indianapolis (5000 West 86th Street)
 STATE: Indiana (46268-1601)

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

	<u>YES</u>	<u>NO</u>
• Landfill	<u>X</u>	<u> </u>
• Surface Impoundment	<u>X</u>	<u> </u>
• Land Farm	<u>X</u>	<u> </u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X *</u>
• Storage Tank (Above Ground)	<u> </u>	<u>X *</u>
• Storage Tank (Underground)	<u> </u>	<u>X *</u>
• Container Storage Area	<u> </u>	<u>X *</u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u>X</u>	<u> </u>
• Transfer Stations	<u> </u>	<u>X</u>
• Waste Recycling Operations	<u> </u>	<u>X *</u>
• Waste Treatment, Detoxification	<u>X</u>	<u> </u>
• Other <u>Staging area</u>	<u>X</u>	<u> </u>

*Such units exist at refinery but are not solid waste management units.

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volume of wastes disposed on and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

Refer to Addendum 1

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII Of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information

- a. Date of release
- b. Type of waste released
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc.)

a. July 23, 1980

b. Oil

c. 40,000 gallons

d. Overflow of east sediment and water pond (no longer in existence) during very heavy rains into run-off system and out NPDES 003 outfall.

4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

The only analyses that exist are for the sludge in the sediment and water pond. Those data are attached as

Addendum 2. The overflow was cleaned up to the satisfaction of all agencies involved (U.S. EPA and State of Indiana).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the submittal is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (42 U.S.C. 6902 et seq. and 40 CFR 270.11(d))

William E. Laque, Environmental Coordinator

Typed Name and Title

William E. Laque
Signature

June 17, 1985
Date

EMS Laboratories Company

7901 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 27, 1980 DATE RECEIVED August 13, 1980
EMS SAMPLE # 17833
P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

SAMPLE DESCRIPTION DRINKING WATER
Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bil Laque

BILL TO:

Sludge OTHER
COLLECTED BY DATE SAMPLED

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
<u>West B S & W Lagoon - Sample analyzed on as received basis</u>				
pH	8.0	8-26	G. Klingler	Electrode method
% Oil	Appx. 20 % by volume	8-26	G. Klingler	
Cyanide	9 µg/gr	8-15	D. McConnaha	Distillation + barbituric acid colorimetric
Phenols	8.5 µg/gr	8-26	C. Mueller	Colorimetric 4AAP
Total Kjeldahl Nitrogen	1191 µg/gr	8-18	M. Bidwell	Digestion + distillation
Chloride on filtered H ₂ O	128 µg/gr	8-20	C. Mueller	Mercuric nitrate
Sulfate on filtered H ₂ O	20 µg/gr	8-22	C. Mueller	Turbidimetric
Cadmium	1.4 µg/gr	8-18	T. Jones	Atomic absorption
Nickel	22 µg/gr	8-18	T. Jones	Atomic absorption
Copper	134 µg/gr	8-18	T. Jones	Atomic absorption
Chromium	255 µg/gr	8-18	T. Jones	Atomic absorption
Zinc	516 µg/gr	8-18	T. Jones	Atomic absorption
Lead	80 µg/gr	8-18	T. Jones	Atomic absorption
Silver	0.3 µg/gr	8-18	T. Jones	Atomic absorption
Aluminum	1600 µg/gr	8-18	T. Jones	Atomic absorption
Mercury	< 0.06 µg/gr	8-22	T. Jones	Flameless atomic absorpti
Arsenic	< 27 µg/gr	8-25	T. Jones	Flameless atomic absorpti
Selenium	< 51 µg/gr	8-25	T. Jones	Flameless atomic absorpti
Barium	142 µg/gr	8-18	T. Jones	Atomic absorption
Vanadium	< 10 µg/gr	8-18	T. Jones	Atomic absorption
Sulfide	< 5 µg/gr	8-21	G. Klingler	Titrimetric-iodine
Sample Prep charge				

Addendum 2

REMARKS:

DATA REVIEWED BY: 

C. STEVEN GOHMA
REPORT COPY

7901 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

EMS SAMPLE # 17833 - 17834

P.O. # 37563-880

SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268

SAMPLE DESCRIPTION

DRINKING WATER

WASTE WATER

Bill To:

Attn: Bill Laque

Sludge

OTHER

COLLECTED BY

DATE SAMPLED

DELIVERY TICKET

No. 6033

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
<u>#17833 - West Lagoon</u>					
Total Solids	28 %	9-19	C. Burton	Gravimetric	\$ 16.50
<u>#17834 - East Lagoon</u>					
Total Solids	31 %	9-19-80	C. Burton	Gravimetric	16.50

*Note - Because of the difficulty in obtaining a representative sample, EMS Laboratories, Inc. makes no warranty except that the analysis has been made, and a report prepared, based upon the samples obtained. Any extrapolation of data from the samples relating to the batch or lot from which it was obtained may not correlate and should be interpreted accordingly with extreme caution.

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY:

\$33.00

C. STEVEN GOHMANN

EMS Laboratories Company

7901 We. Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 27, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17834

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

Rock Island Refining Corporation
5000 West 86th St.
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION DRINKING WATER

WASTE WATER

Sludge OTHER

BILL TO:

COLLECTED BY DATE SAMPLED

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
<u>East B S & W Lagoon - Sample analyzed on as received basis</u>				
pH	7.8	8-26	G. Klingler	Electrode method
% Oil	Appx. 10 % by volume	8-26	G. Klingler	
Cyanide	≤ 1 $\mu\text{g/gr}$	8-15	D. McConnaha	Distillation + barbituric acid colorimetric
Phenols	8.8 $\mu\text{g/gr}$	8-26	C. Mueller	Colorimetric 4AAP
Total Kjeldahl Nitrogen	855 $\mu\text{g/gr}$	8-18	M. Bidwell	Digestion + distillation
Chloride on filtered H_2O	199 $\mu\text{g/gr}$	8-26	M. Bidwell	Mercuric nitrate
Sulfate on filtered H_2O	288 $\mu\text{g/gr}$	8-26	C. Mueller	Turbidimetric
Cadmium	≤ 1.1 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Nickel	7 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Copper	43 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Chromium	232 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Zinc	122 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Lead	41 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Silver	1.3 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Aluminum	902 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Mercury	0.0051 $\mu\text{g/gr}$	8-19	T. Jones	Flameless atomic absorpti
Arsenic	≤ 57 $\mu\text{g/gr}$	8-25	T. Jones	Flameless atomic absorpti
Selenium	205 $\mu\text{g/gr}$	8-26	T. Jones	Flameless atomic absorpti
Barium	28 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Vanadium	≤ 10 $\mu\text{g/gr}$	8-18	T. Jones	Atomic absorption
Sulfide	≤ 5 $\mu\text{g/gr}$	8-26	G. Klingler	Titrimetric-iodine
Sample Prep				

Addendum 2

REMARKS:

DATA REVIEWED BY: 

C. STEVEN GOHM
REPORT COPY

EMS Laboratories Company

7901 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE August 26, 1980 DATE RECEIVED August 13, 1980

EMS SAMPLE # 17835 -17836

P.O. # 37563-880 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

SAMPLE DESCRIPTION DRINKING WATER
Rock Island Refining Corporation

5000 West 86th St. WASTE WATER

PO Box 68007

Indianapolis, Indiana 46268

BILL TO:

Attn: Bill Laque

COLLECTED BY DATE SAMPLED

Analyses performed according to 40 CFR 261

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS
<u>#17835 - West 17833</u>				
Cadmium	0.02 mg/l	8-25	T. Jones	Atomic absorption
Chromium	0.13 mg/l	8-25	T. Jones	Atomic absorption
Lead	< 0.2 mg/l	8-25	T. Jones	Atomic absorption
Silver	< 0.01 mg/l	8-25	T. Jones	Atomic absorption
Mercury	< 0.0005 mg/l	8-25	T. Jones	Flameless atomic absorptio
Arsenic	< 0.5 mg/l	8-25	T. Jones	Flameless atomic absorptio
Barium	0.8 mg/l	8-25	T. Jones	Atomic absorption
Leachate Prep charge				
Selenium	< 0.5 mg/l	8-25	T. Jones	Flameless atomic absorptio
<u>#17836 - East 17834</u>				
Cadmium	< 0.01 mg/l	8-25	T. Jones	Atomic absorption
Chromium	< 0.01 mg/l	8-25	T. Jones	Atomic absorption
Lead	< 0.2 mg/l	8-25	T. Jones	Atomic absorption
Silver	< 0.01 mg/l	8-25	T. Jones	Atomic absorption
Mercury	< 0.0005 mg/l	8-25	T. Jones	Flameless atomic absorptio
Arsenic	< 0.5 mg/l	8-25	T. Jones	Flameless atomic absorptio
Selenium	< 0.5 mg/l	8-25	T. Jones	Flameless atomic absorptio
Barium	< 0.1 mg/l	8-25	T. Jones	Atomic absorption
Leachate Prep Charge				

*Note - Sample analyzed on as received basis.

REMARKS:

DATA REVIEWED BY:

C. STEVEN GOHMANN
REPORT COPY

Addendum 2

1C 2b

MAR 04 1985

Mr. William Laque
Environmental Coordinator
Rock Island Refinery Corporation
5000 West 86th Street
Indianapolis, IN 46268

Dear Mr. Laque:

Re: Permit Writer's Site Visit
Rock Island Refinery, Indianapolis
IND 006417430

This letter is pursuant to the January 29 and January 30, 1985, Permit Writer's Site Visit (pursuant to EPA Part B permit application) conducted by Ms. Cynthia Hall of my staff. Ms. Hall was accompanied by Mr. Dave Koepper and Mr. Tom O'Leary of our Compliance Monitoring Section.

The Permit Writer's Site Visit was conducted so that:

1. The permit writer would have an understanding of the facility's hazardous waste management practices; and
2. The permit writer may provide technical assistance to the Part B applicant.

Ms. Hall's permit writer's site visit confirmed the following regarding Rock Island Refinery Corporation's hazardous waste management practices:

1. The SRU-Incinerator combusts tail gas from the Claus Sulfur Recovery Unit. The unit is not a hazardous waste incinerator but an air pollution control device. The Part A permit must be revised to reflect that (T03) incinerator process is not applicable.
2. The sludges generated (K049, K050, K051) are accumulated and dewatered via a vacuum filter. This dewatering process is not considered "treatment" pursuant to 40 CFR 260 Subpart B. The Part A permit must be revised to reflect that (T04) physical treatment is not applicable. Rock Island Refinery was issued an temporary exclusion of K049, K050, and K051 by the U.S. Environmental Protection Agency on March 12, 1982. Temporary delisting by the Indiana State Board of Health was granted provisionally for a variance of the aforementioned hazardous waste on February 7, 1983. The facility is preparing documentation to apply for total delisting. Submittal of documentation to U.S. EPA is proposed by August 1985.

*this is wrong
define include
rejection
make a note
unavailable
change*

3. Basic sediments (D81) and application of sludges occurred after November 19, 1980, but they had been tested for hazardous waste characteristics and found to be non-hazardous.
4. The API Separator is listed in the Part A permit as tank treatment. The API Separator is part of the facilities closed loop process and therefore is not considered tank treatment. The Part A must be revised accordingly.
5. The sludge (K049, K050, K051) generated from the vacuum filter is contained in a roll off dumpster and is manifested off-site within 90 days. However, this waste is covered by a temporary delisting variance.

The present RCRA status of Rock Island Refinery Corporation appears to be that of a storage facility for the tanks holding API Separator sludges prior to dewatering.

If you have any questions regarding this matter or require additional information, please contact Ms. Cynthia Hall of my staff at AC 317/243-5093.

Very truly yours,

Terry F. Gray

Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Division of Land Pollution Control

CBH/sk

cc: Mr. Dave Koepper, ISBH
Mr. Martin Hamper, U.S. EPA, Region V
Mr. Ken Burch, U.S. EPA, Region V

sk 1138B 2/27/85

IND 006417630

PS Form 3811, July 1962

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
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- ☐ Show to whom, date, and address of delivery c
2. ☐ **RESTRICTED DELIVERY** c
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$

3. ARTICLE ADDRESSED TO: William Lagae
Rock Island Refining Corp.
5200 W. 9th Street
Indianapolis, IN 46261

4. TYPE OF SERVICE:
- ☐ REGISTERED ☐ INSURED
- ☐ CERTIFIED ☐ COD
- ☐ EXPRESS MAIL
- ARTICLE NUMBER
PO06926314

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE ☒ Addressee ☐ Authorized agent

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POSTMARK
(may be on reverse side)

6. ADDRESSEE'S ADDRESS (Only if requested)

7. UNABLE TO DELIVER BECAUSE:

7a. EMPLOYEE'S INITIALS

• GPO: 1962-379-593

RETURN RECEIPT

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS



PENALTY FOR PRIVATE
USE, \$300

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN
TO



Martin Haggren
U.S. EPA - SWW

(Name of Sender)

230 S Dearborn

(Street or P.O. Box)

Chicago IL 60604

(City, State, and ZIP Code)

IND 006417430

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

AUG 24 1984

5W

Mr. William Laque
Environmental Coordinator
Rock Island Refining Corporation
5000 West 86th Street
Indianapolis, Indiana 46268

Re: Rock Island Refining Corporation
5000 West 86th Street
Indianapolis, Indiana 46268
IND006417430

Dear Mr. Laque:

By now you should have received an acknowledgement of our receipt of the Part A permit application material for the above-referenced hazardous waste facility under the Resource Conservation and Recovery Act (RCRA) permit program. Accordingly, this letter constitutes the next step in the formal process leading toward issuance or denial of a RCRA permit. Under the authority of 40 CFR 270.10, this is a formal request for submittal of Part B of the permit application for the above-referenced facility.

Enclosed is a copy of 40 CFR 270.14, which lists the items required for submitting the Part B permit application for the facility. The Part B application must be submitted in quadruplicate and postmarked no later than February 28, 1985. The original and 3 copies of the application must be sent to the United States Environmental Protection Agency (U.S. EPA) at the address below. Please uniquely number each page of the application including all attachments (maps, specifications, etc.). A certification statement identical to the one stated in 40 CFR 270.11(d) must accompany the application and all additional submittals. Send your application to the following address:

RCRA ACTIVITIES
Part B Permit Application
U.S. EPA, Region V
P.O. Box A3587
Chicago, Illinois 60690-3587

We are committed to conducting the RCRA permitting process as efficiently as possible. Consequently, I suggest you contact Mrs. Edith Ardiente of my staff, at (312) 886-0984, as you begin preparing your application. Mrs. Ardiente will be available to discuss specific needs of your application or to meet with you in Chicago. These efforts are intended to generate complete applications, without requiring any information beyond that which is necessary to make RCRA permit decisions.

100

U.S. EPA will review business confidentiality claims under regulations in 40 CFR Part 2, and may later request substantiation of such claims. Please review these rules carefully before making a claim. If you claim parts of your application as confidential, please provide us with a public information copy of the application. The public information copy must be identical to the full application with the exclusion of the confidential information.

We will coordinate review of the application with the Indiana State Board of Health (ISHB), and will strive for the simultaneous issuance of Federal and State hazardous waste facility permits. It is possible that during the processing of the application, the State Hazardous Waste Program may become authorized to issue RCRA permits for your type of facility. In that case, State Federal processing will cease, and ISHB in lieu of U.S. EPA will make the final determination on your permit application.

[illegible]

Attachment: 80 CFR 270 (Regulations Pertaining
 to CWA 319a (Regulation 319a)
 Guidance for Permit Application Preparation
 State of Colorado Permit Application

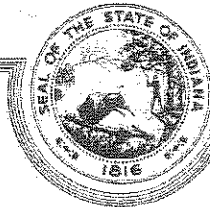
Figure 1 displays the four quadrants of the Rorschach inkblot test, arranged in a 2x4 grid. The top row shows the left half (I, II, III, IV) and the bottom row shows the right half (V, VI, VII, VIII). Each quadrant is labeled with its Roman numeral and a brief description of its shape and color.

Quadrant	Description
I	White, irregular shape
II	White, irregular shape
III	White, irregular shape
IV	White, irregular shape
V	White, irregular shape
VI	White, irregular shape
VII	White, irregular shape
VIII	White, irregular shape

DATE _____

WNC
DRE

STATE OF INDIANA



STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

RECEIVED
APR 12 1985
WASTE MANAGEMENT
INDIANAPOLIS

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P.O. Box 1964
Indianapolis, IN 46206-1964

Mr. William Minor, Chief
Technical, Permit, and Compliance Section
U.S. EPA, Region V
230 South Dearborn Street
Chicago, IL 60604

April 9, 1985

RECEIVED
APR 12 1985
HWES

Dear Mr. Minor:

Re: Part B Permit Application for
Rock Island Refining Corporation
IND 000641730

We have conducted a completeness review of the above-referenced facility's Part B permit application. Our review found the application to be incomplete of the required information. Attached is a copy of the notice of deficiency.

Please note that the Part B permit application addresses only the hazardous waste processes contained in their February 28, 1985, revised Part A permit application. The process codes contained in the original Part A application were not addressed. Subsequently, the attached notice of deficiencies reflect the contents of the Part B permit application pursuant to the revised Part A.

Deficiencies contained in the Financial Assurance component of the application have been addressed by Mr. Jeff Stevens, staff attorney. (See attached March 22, 1985, letter.)

Furthermore, Appendix F and Appendix G, Financial Assurance sections, were marked as being confidential information. However, these pages were submitted in the application. No claim of confidentiality was included and the stamped pages were not separately sealed. Therefore, the information was made public.

Please contact Ms. Cynthia Hall of my staff at AC 317/243-5093 if you have any questions.

Very truly yours,

Terry F. Gray

Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Division of Land Pollution Control

CBH/sk

cc: Mr. Kenneth Burch, U.S. EPA, Region V
Mr. Hak Cho, U.S. EPA, Region V

1584

Rock Island Refining Corporation
Completeness Review
Notice of Deficiency
IND 000641730

1. Provide a detailed topographical map containing all of the items required by 270(b)(19).
2. Attachment D.VI, page 23--Photographs of the facility delineating all existing structures, existing treatment, storage, and disposal areas, and sites of future treatment, storage, and disposal areas are not legible. Provide legible copies. 270.13(h)(2).
3. Appendix A, page 116. Waste Analysis Plan. Revise plan to include analysis parameters with rationale, procedure for collecting representative samples, and frequency of analysis.
4. Section IV, page 45. Security Procedures and Equipment. Provide in detail a description of the warning signs, statement of 25-foot legibility and the exact location of signs. 270.14(c).
5. Section V, page 46. General Inspection Schedule. Provide statement as to where, at the Refinery, the inspection schedule and the inspection reports will be kept. 265.15(d).
6. Section VII, page 54. Contingency Plan. Provide documentation of arrangements or attempts of arrangements with police department, hospital, etc. Only descriptions of arrangements were provided. 264.37, 264.52(c).
7. Section VI, Appendix C. Contingency Plan. Provide a detailed list of emergency equipment, documentation of equipment location, physical description of equipment, and statement of equipment capability. 264.52(e).
8. Contingency Plan. page 75. Provide ultimate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous wastes or fire). 264.52(f).
9. Contingency Plan. page 54.
 - A. Provide description of cleanup procedures and associated material testing, material treating, storage procedures, description of emergency equipment decontamination and refitting procedures, and description of procedures to ensure incompatible waste segregation during cleanup. 270.14(b).
 - B. Provide description of procedures to mitigate equipment failure and power outages. 270.14(b)(8)(iii).
 - C. Provide description to prevent undue personnel exposure to hazardous waste. 270.14(b)(8)(v).

10. Section IV, page 91. Traffic Patterns. Provide detailed documentation of waste movement routes, number of movements by type of vehicles, quantity of waste per movement per vehicle, and traffic control signals. 270.14(b)(10).
11. Section XI. page 93. Personnel Training. Provide qualifications of program instructor and brief description of how the training program meets the actual job task. 270.14(b)(12).
12. Section XII. Closure Plan. Provide a description of the maximum unclosed portion during facility life, an estimate of maximum waste inventory in storage/treatment during facility life, trackable intervening closure activities, location(s) and number of copies of the closure plan, identification of person responsible for storage and updating the facility copy of closure plan, and procedure for updating all other copies of closure plan. 270.14(b)(13).

CBH/11

SECTION 10.0

COMPLETENESS CHECKLIST

This section contains a checklist of items which must be included in a RCRA permit application. The checklist separately covers the items required in Part A and B of a land storage, treatment, and disposal permit application. The checklist is 41 pages long and addresses all of the permit application requirements that are discussed in this manual. The checklist also addresses the general information requirements of §270.14(b) on pages 3 through 14 and 21.

It is recommended that this checklist be used during review of the completeness of any permit application. After conducting the review, this checklist will provide a table of contents and a summary of the permit application. As such, it will assist permit reviewers in preparation of deficiency letters. The cover sheet can be used to indicate personnel who conducted the review and will provide a mechanism for checking on questions and comments which arise at later stages in the review process.

Each required information item is briefly stated. Regulatory citations are provided which enable quick location of the full text of the regulation that contains each required item. If no citation is indicated next to a specific item, the last citation indicated above the item contains the requirement.

Spaces are provided for indication of whether the item is included, not included, inadequate, or not applicable. Space is also provided to record the location of items in the application.

The required items are listed in the sequence that they are presented in 40 CFR 270 except where presentation of information from a later section is specifically requested by the subject regulatory citation. A major exception is that the additional information requested in §270.14(c) is listed at the end of the checklist beginning on page 35.

RCRA PERMIT APPLICATION COMPLETENESS CHECKLISTS FOR PARTS A & B

Date Application Received 3/4/85 (ISLA)

Applicant Name Rock Island Refining Corporation

Applicant Contact Mr William Lee

Applicant Contact Telephone Number 317-872-3200

EPA I.D. Number END 006417430

Permit Review Team *LONGTENESS CUL*[illegible]

Comments Part B application addressed hazardous waste process codes
listed in 2005 Revised Part A appl. only. No action by EPA
to date on Revised Part A. Part B ^{NOI} Comp noted only Revised Part A
codes

420
00641730

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.10(d) and 270.13		Part A Requirements (2/28/85 REVISED (P.A.A.))						
270.13(g)	-	Statement that facility is new or existing	✓	✓				p. 25
270.13(g)	-	Statement that application is first or revised	✓					p. 25
270.13(m)	-	Description of business conducted	✓					p. 26
270.13(c)	-	SIC Codes	✓					p. 26
270.13(a)	-	Description of activities requiring permit	✓					p. 26
270.13(b)	-	Facility Name	✓					p. 25
270.13(b)	-	Mailing Address	✓					"
270.13(b)	-	Location	✓					"
270.13(b)	-	Latitude and Longitude	✓					p. 29
270.13(h)(1)	-	Scale drawing (existing facility only)	✓					p. 30 131
	-	Sufficient detail	✓					"
270.13(i)	-	Topographic Map	✓					p. 29
	-	Sufficient detail	✓		✓			"
270.13(i)	-	Other map	✓					Not required
	-	Sufficient detail	✓					Not required
270.13(h)(2)	-	Photographs (existing facilities only)	✓		✓			Not required
	-	Sufficient detail	✓		✓			"
270.13(e)	-	Owner: Name	✓					p. 24
	-	Address	✓					"
	-	Telephone	✓					"
270.13(d)	-	Operator: Name	✓					"
	-	Address	✓					"
	-	Telephone	✓					"

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.13(d)	-	Identification of facility ownership status and status as Federal, State, private, public, or other entity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p.24	
270.13(f)	-	Statement that facility is or is not on Indian lands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
270.13(k)	-	Listing of all permits and construction approvals received/applied for	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p.27	
270.13(j)	-	List of 40 CFR 261 wastes and annual amounts to be handled	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p.36	
270.13(i)	-	Description of all processes to be used to handle wastes and design capacity of each process	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p.35	
Part A Certification and Signatories								
270.11(d)	-	Certification paragraph	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p.38	
270.11(a)	-	Appropriate signatory	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	u	

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14		Part B General Information Requirements						
270.14(b)(1)		- General description of the facility	✓				p. 41	
270.14(b)(2)	264.13(m)	- Chemical and physical analysis of hazardous wastes to be handled	✓				p. 42	
270.14(b)(3)		- Waste analysis plan	✓				Sec. IV	
	264.13(b)(1)-(5)	- Analysis parameters with rationale	✓				p. 116	
		- Test methods for analyzing parameters	✓				"	
		- Procedure for collecting representative samples		✓				
		- Frequency of analyses		✓				
		- List and description of waste analyses to be generator supplied	✓				p. 118-32	
	264.13(b)(6) and 264.17(c)	- Waste analysis procedures for ignitable, reactive, incompatible wastes				✓		
	264.13(c)	- Procedures to determine identity of each waste movement				✓		
		- Procedures for collecting representative samples				✓		
270.14(b)(4)		- Security description for active portion of facility	✓				p. 45	
	264.14(a)	- Security procedures waiver justification				✓		
		- Unknowning/unauthorized contact with waste not harmful				✓		
		- Unknowning/unauthorized disturbance of waste or equipment cannot cause violation of Part 264				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(4)	264.14(b)	- Description of 24-hour surveillance system	✓		✓		p. 45	NEED BETTER DESCRIPTION
		- Description of artificial or natural barriers	✓				"	
		- Description of controlled entry/egress procedures	✓				"	
	264.14(c)	- Description of warning signs	✓				"	
		- List of languages on signs		✓				
		- Statement of 25-foot legibility		✓				
		- Description of sign locations and numbers of signs		✓				
270.14(b)(5)		- General Inspection Schedule and Procedures Description	✓				p. 46	
	264.15(b)(1)	- Written schedule	✓				"	
	264.15(b)(2) and 265.15(d)	- Statement as to where, at facility, inspection schedule and inspection records will be kept		✓				
	264.15(b)(1)	- Identification of equipment/processes to be inspected	✓				p. 46-7	
	264.15(b)(3)	- Identification of types of problems each equipment/process to be checked for	✓				"	
	264.15(b)(4)	- Frequency of inspections by equipment/process	✓				"	
	264.15(c)	- Schedule of remedial action	✓				"	
270.14(b)(5) and 270.17(d)	264.15(a) and 264.226	- Specific Inspection Requirements for Surface Impoundments						
		- Description of procedures for						
		- Inspection of liners/covers during and immediately after installation						

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(5) and 270.17(d)	264.15(a) and 264.226	- Inspections weekly and after storms for				✓		
		- Operation of overtopping controls				✓		
		- Sudden drop in impoundment liquid level				✓		
		- Presence of liquid in leak detection system				✓		
		- Integrity of dikes/containment devices				✓		
		- Statement from qualified engineer that structural integrity of dikes will be certified upon construction completion				✓		
		- Qualified engineer's certification of dike integrity for				✓		
270.14(b)(5) and 270.18(e)	264.15(a) and 264.254	- Stress				✓		
		- Piping/scouring				✓		
		- Specific Inspection Requirements for Waste Piles				✓		
		- Description of procedures for				✓		
		- Inspection of liners/covers during and immediately after installation				✓		
		- Inspections weekly and after storms for				✓		
		- Operation of run-on/run-off controls				✓		
		- Liquids in leak detection system				✓		
		- Proper functioning of wind dispersal controls				✓		
		- Leachate in and proper operation of leachate collection/removal system				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(5) and 270.20(c)(5)	264.15(a) and 264.273(g)	- Specific Inspection Requirements for Land Treatment Units			✓			
		- Description of procedures for units inspections weekly and after storms for			✓			
		- Operation of run-on/run-off controls			✓			
		- Function of wind dispersal controls			✓			
270.14(b)(5) and 270.21(d)	264.15(a) and 264.303	- Specific Inspection Requirements for Landfills			✓			
		- Description of procedures for			✓			
		- Inspection of liners/covers during and immediately after installation			✓			
		- Inspections weekly and after storms for			✓			
		- Operation of run-on/run-off controls			✓			
		- Liquids in leak detection system			✓			
		- Proper functioning of wind dispersal controls			✓			
		- Leachate in and proper operation of leachate collection/removal system			✓			
270.14(b)(6)	Part 264 Subpart C	- Preparedness and Prevention Documentation	✓				p.49	
		- Waiver(s) request and justification				✓		
	264.32(a)	- Description of internal communications/ alarm system(s)	✓				p.50	
	264.34(a)	- Documentation of personnel access to internal communication/alarm system(s)	✓		✓		p.51	more detail
	264.32(b)	- Description of external communications/ alarm system(s)	✓				p.50	
	264.34(b)	- Documentation of personnel access to external communications/alarm system(s)	✓		✓		p.51	more detail

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	* Location in Application	Comments
270.14(b)(6)	264.32(c)	- Description of fire control/ extinguishing, spill control, and decontamination equipment	✓				p50	
	264.32(d)	- Documentation of adequate water volume and pressure for above equipment	✓				"	
	264.33	- Documentation of equipment testing/ maintenance schedule and procedures	✓				p46	
	264.35	- Documentation of adequate idle space		✓				
	264.37 (also 264.52(c))	- Documentation and descriptions of arrangements or attempts at arrangements with;	✓		✓		p54	Documentation NEEDED
		- Police department(s)	✓					
		- Fire department(s)	✓					
		- Hospitals	✓					
		- Local emergency response teams	✓					
		- State emergency response teams	✓					
		- Emergency response contractors	✓					
		- Equipment suppliers	✓					
	264.37(a)(2)	- Documentation of agreements designating primary emergency authority		✓				
270.14(b)(7)	Part 264 Subpart D	- Contingency Plan Documentation	✓				p61	
	264.51 and 264.52(a)	- Criteria for implementation of contingency plan	✓				p50	
	264.52(d)	- Emergency Coordinators Identification	✓				p57	
		- Names	✓				"	
		- Addresses	✓				"	

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(7)	264.53	- Home/Work Phones	✓		✓			Other extensions
		- Documentation of Qualifications		✓				
		- Documentation of Authority	✓					p. 57
		- Description of notification procedure	✓					p. 56
	264.52(e)	- Emergency equipment list	✓		✓		80-51	
		- Documentation of equipment location	✓		✓		"	
		- Physical description of equipment	✓		✓		"	
		- Statement of equipment capabilities	✓		✓		"	
	264.52(f)	- Evacuation Plan	✓					p. 75
		- Criteria for implementation	✓					
264.53		- Description of signal(s) to implement						
		- Description of primary and alternate routes	✓		✓			No alternate routes
		- Contingency Plan Copy Location	✓					
		- Description of location of facility's copy of plan	✓		✓			plan NEW HAVEN OFFICE
	264.54	- Number of duplicate copies distributed and their location		✓				
		- Contingency Plan Amendment		✓				
		- Identification of person responsible and authorized to change/amend plan		✓				
		- Description of procedure to change/amend facility copy of plan		✓				
		- Description of procedure to insure update of all copies of plan		✓				

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(7)	264.56	- Detailed Emergency Procedures	✓				p. 56	
		- Procedure for facility personnel notification	✓				"	
		- Procedure for state/local agency notification	✓				"	
		- procedure for identification of character, source, amount, and areal extent of released materials	✓				p. 58	
		- Procedure for assessment of environment/human health hazards	✓				"	
		- Identification of On-Scene Coordinator for geographic area	✓				"	
		- Description of specific responses and control procedures for	✓				p. 57	
		- Fire	✓				"	
		- Explosion	✓				"	
		- Spill	✓				"	
		- Description of process shutdown and monitoring procedures	✓				p. 59	
		- Description of cleanup procedures and associated material treating, storing, disposal procedures		✓				
		- Description of emergency equipment cleaning and refitting procedures	✓		✓		p. 59	more detail
		- Description of procedures to insure incompatible waste segregation during cleanup	✓		✓		"	"
270.14(b)(7) and 270.17(f)	264.227	- Specific Contingency Plan Requirements for Surface Impoundments				✓		
		- Procedure for stopping waste addition to impoundment				✓		

Part 270 Part 264 Subject Requirement

264.227

- Procedure for containing leakage
- Procedure to prevent catastrophic failure
- Procedure for emptying impoundment
- Procedure for recertifying and reactivating impoundment
- Procedure for closing impoundment

Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

[Note: There are no §122.25 requirements which parallel Part 264, Subpart E. However, the applicant should be familiar with the following sections of the regulations since the requirements in them will be enforceable under any permit received.
Part 264, Subpart E, §264.70 through §264.77
Part 270, Subpart C, §270.30(j) and §270.30(1)
The applicant should be prepared to respond to inquiries by the permit application reviewers regarding these requirements]

270.14(b)(8)

- Preventive Procedures, Structures, and Equipment Documentation, including descriptions of equipment/procedures to
- Prevent hazards during unloading operations
- Prevent run-off and flooding
- Prevent water supply contamination
- Mitigate equipment failure and power outages
- Prevent undue personnel exposure to wastes

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p. 70
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p. 60
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	p. 60
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

270.14(b)(9) 264.17

- Prevention of Accidental Ignition or Reaction Documentation
- Description of separation and protection of ignitable, reactive, incompatible wastes
- Description of ignitable, reactive, incompatible wastes handling procedures
- Description of number, location, and type of warning/prohibition signs

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Handwritten (over) p. 90
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Documentation that procedures are adequate to prevent accidental ignitions or reactions				✓		
		- Description of number, location, and type of warning/prohibition signs				✓		
		- Documentation that procedures are adequate to prevent accidental ignitions or reactions				✓		
270.14(b)(9) and 270.17(h) and 270.17(i)	264.17(b)	- Specific Ignitable/Reactive Waste Requirements for Surface Impoundments				✓		
	264.229	- Procedures that render waste nonreactive or nonignitable				✓		
		- Procedures for preventing reactions				✓		
		- Procedures for protecting wastes				✓		
	264.230	- "Emergency use only" documentation				✓		
		- Incompatible waste segregation or protection procedures				✓		
270.14(b)(9) and 270.18(g) and 270.18(h)	264.17(b)	- Specific Ignitable/Reactive Waste Requirements for Waste Piles				✓		
	264.236	- Procedures that render waste nonreactive or nonignitable				✓		
		- Procedures for preventing reactions				✓		
		- Procedures for protecting wastes				✓		
	264.257	- Incompatible waste segregation or protection procedures				✓		
270.14(b)(9) and 270.20(g) and 270.20(h)	264.17(b)	- Specific Ignitable/Reactive Waste Requirements for Land Treatment Facilities				✓		
	264.201	- Documentation that application to soil renders waste nonreactive/nonignitable and prevents reactions				✓		
		- Procedures for protecting wastes				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
	264.282	- Procedures which insure that incompatible wastes are not applied to same treatment zone				✓		
270.14(b)(9) and 270.21(f) and 270.21(g)	264.17(b)	- Specific Ignitable/Reactive Waste Requirements for Landfills				✓		
	264.312	- Procedures that render wastes nonreactive and nonignitable				✓		
		- Procedures for preventing reactions				✓		
		- Procedures for protecting wastes				✓		
	264.313	- Procedures for insuring that incompatible wastes will not be disposed of in same landfill cell				✓		
	264.316 (c)-(e)	- Procedures for identifying contents and insuring proper landfilling of incoming labpacks				✓		
270.14(b)(10)		- Traffic Documentation						
		- Identification of;						
		- Waste movement routes		✓				
		- Number of movements by type vehicle		✓				
		- Quantity of waste moved per movement per vehicle		✓				
		- Traffic control signals and personnel		✓				
		- Route surface composition and load bearing capacity	✓					
270.14(b)(11)		- Facility Location Documentation				✓		
270.14(b)(11) (i) and (ii)		- Political jurisdiction identified (new facilities only)				✓		
		- Comparison to Appendix VI of Part 264				✓		

p. 91

none detail

p. 91

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	* Location in Application	Comments
	264.18(a)	- Demonstration that faults with displacement in Holocene time are more than 3000 feet from facility				✓		
		- Demonstration that no faults pass within 200 feet of sites where T/S/D to be conducted				✓		
270.14(b)(11) 264.18(b)(iii)-(iv)		- Documentation of facility location relative to 100-year flood plain level or wave action flooding	✓				P. 72	
		- Documentation that facility can withstand the 100-year flood without washout of hazardous waste by:				✓		
		- Analysis of hydrodynamic/hydrostatic forces resulting at site from 100-year flood, and				✓		
		- Presentation of operating units and flood protection devices design and how they will prevent washout, or				✓		
		- Plan for removal of waste before washout including,				✓		
		- Timing of removal relative to flood levels				✓		
		- Estimated time to remove all waste				✓		
		- Location to which waste will be moved and proof of compliance with Parts 122 through 124 and 264 through 267 of this Chapter.				✓		
		- Detailed description of personnel, equipment, and procedures for waste removal sufficient to insure availability in time for use				✓		
		- Analysis of potential for discharge during waste movement				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b) (11)(v)		- A plan documenting how and on what time schedule the facility will comply with §264.18(b) if not in compliance (existing facilities only).				✓		
270.14(b)(12)	264.16	- Personnel Training Program Documentation	✓				p. 93	
		- Outline of introductory and continuing personnel training programs	✓		✓		p. 11	
		- Identification and qualifications of program instructor		✓	✓			
		- Brief description of how training program meets actual job tasks		✓				
		- Description of procedures to insure all appropriate personnel receive appropriate training and receive annual training review.	✓				p. 94	
		- Description of records to be kept, their location, and procedures to insure they are retained for proper length of time	11 ✓				p. 96	
270.14(b)(13)	264.112	- Closure Plan Documentation	✓				p. 97	
		- Description of partial and final closure procedures.	✓				p. 14	p.
		- Description of maximum unclosed portion during facility life		✓				
		- Estimate of maximum waste inventory in storage/treatment during facility life		✓				
264.114		- Equipment decontamination procedure.	✓				p. 99	
		- Estimated year of closure	✓					
264.113		- Description of closure schedule including	✓				p. 103	
		- Total time to close	✓				p. 104	

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b)(13)	264.113	- Frackable intervening closure activities		✓				
		- Location(s) and number of copies of closure plan		✓				
		- Identification of person responsible for storage and updating of facility copy of closure plan		✓				
		- Procedure for updating all other copies of closure plan		✓				
270.14(b)(13) and 270.17(g)	264.112 and 264.228(a)	- Specific Closure Plan Requirements for Surface Impoundments				✓		
		- Procedures for removal and/or decontamination of all wastes and materials/equipment associated with the impoundment, or				✓		
		- Detailed plans and engineering reports describing				✓		
		- Elimination of free liquids				✓		
		- Stabilization of remaining wastes				✓		
		- Design of final cover demonstrating				✓		
		- Liquid migration minimization				✓		
		- Function with minimum maintenance				✓		
		- Drainage promotion				✓		
		- Erosion/abrasion minimization				✓		
		- Settling/subsidence accommodation				✓		
		- Permeability less than liner or subsoils				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b) (13) and 270.18(i)	264.112	- Specific Closure Plan Requirements for Waste Piles				✓		
	264.258(a)	- Procedure for removal and/or decontamination of all wastes and materials/equipment associated with the waste pile				✓		
	264.258(b)	- Procedure for closing in conformance with landfill closing requirements				✓		
270.14(b) (13) and 270.20(f)	264.112	- Specific Closure Plan Requirements for Land Treatment Facilities				✓		
	264.280(a)	- Procedures to maximize degradation of waste in treatment zone				✓		
		- Procedures to minimize waste runoff				✓		
		- Run-off system maintenance procedures				✓		
		- Wind dispersal control procedures				✓		
		- Procedures for compliance with food-chain crop growth				✓		
		- Procedures for unsaturated zone monitoring				✓		
		- Description of vegetative cover				✓		
		- Procedures for establishing vegetative cover				✓		
270.14(b) (13) and 270.21(e)	264.112 and 264.310(a)	- Specific Closure Plan Requirements for Landfills				✓		
		- Detailed plans and an engineering report which describes the final cover components in detail				✓		
		- Documentation that the final cover will				✓		
		- Provide long-term minimization of migration of liquids through closed landfill				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Function with minimum maintenance				✓		
		- Promote drainage and minimize erosion/abrasion				✓		
		- Settle/subside without losing integrity				✓		
		- Be less permeable than bottom liners or subsoils				✓		
270.14(b) (13)	264.117 and 264.118	- Post-Closure Plan Documentation				✓		
		- Description of ground water monitoring activities and frequencies				✓		
		- Description of maintenance activities and frequencies for;				✓		
		- Final containment structures				✓		
		- Facility monitoring equipment				✓		
		- Location(s) and number of copies of post-closure plan				✓		
		- Identification and location (address and phone number) of person responsible for storage and updating of facility copy of post-closure plan prior to closure				✓		
		- Identification and location (address and phone number) of person responsible for storage and updating facility copy of post-closure plan during post-closure period				✓		
		- Procedure for updating all other copies of post-closure plan				✓		
270.14(b) (13) and 270.17(g)	264.118 and 264.228(b)	- Specific Post-Closure Plan Requirements for Surface Impoundments				✓		
		- Procedures for maintenance and repair of final cover				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Procedures for maintenance and monitoring of leak detection system				✓		
		- Procedures for maintenance and monitoring of ground water monitoring system				✓		
		- Procedures for compliance with Subpart F				✓		
		- Procedures for preventing run-on/run-off final cover damage				✓		
270.14(b) (13) and 270.18(i)	264.118 and 264.258(b)	- Specific Post-Closure Plan Requirements for Waste Piles				✓		
		- Procedures for post-closure care that meet the requirements for landfills				✓		
270.14(b) (13) and 270.20(f)	264.118 and 264.280(c)	- Specific Post-Closure Plan Requirements for Land Treatment Facilities				✓		
		- Procedures to enhance degradation of wastes in treatment zone				✓		
		- Procedure for maintaining vegetative cover				✓		
		- Procedure for maintaining run-on controls				✓		
		- Procedure for maintaining run-off controls				✓		
		- Procedures for wind dispersal control				✓		
		- Procedures to insure compliance with food-chain crop prohibitions				✓		
		- Procedures for unsaturated zone monitoring				✓		
270.14(b) (13) and 270.21(e)	264.118 and 264.310(b)	- Specific Post-Closure Plan Requirements for Landfills				✓		
		- Procedures for maintenance and repair of final cover				✓		
		- Monitoring and maintenance procedures for leak detection system				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Procedure for leachate collection/removal system operation				✓		
		- Procedures to maintain and monitor ground water monitoring system				✓		
		- Procedures for compliance with Subpart F				✓		
		- Procedures for preventing final cap erosion due to run-on and run-off				✓		
		- Procedures for protection and maintenance of benchmarks				✓		
	264.110(c)	- Procedures to be undertaken if liquid is found in leak detection system				✓		
270.14(b) (14)	264.120	- Documentation of Notice on Deed (existing facilities only)				✓		
		- Statement that land used to manage wastes				✓		
		- Statement of restricted use per §284.117(c)				✓		
	264.119	- Documentation of type, location, and quantity of wastes filed with local authority and EPA Regional Administrator				✓		
270.14(b) (15)	264.142	- Closure Cost Estimate	✓		✓			
	264.143 and 264.146	- Documentation of a financial assurance mechanism for closure that is:						(APP. F) ADDRESSED BY J. STEVENS ATTORNEY IN 3/22/85 LETTER TO FACILITY
	264.151(a)	- Closure trust fund						
	264.151(b)	- Surety bond guaranteeing payment						
	264.151(c)	- Surety bond guaranteeing performance						
	264.151(d)	- Closure letter of credit						
	264.151(e)	- Closure insurance						
	264.151(f) and (h)	- Financial test and corporate guarantee						

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b) (16)	264.144	- Multiple financial mechanism for one facility			✓	✓		
		- Single financial mechanism for multiple facilities				✓		
		- Post-Closure Cost Estimate				✓		
		- Documentation of a financial assurance mechanism for post-closure that is;				✓		
		- Closure trust fund				✓		
		- Surety bond guaranteeing payment				✓		
		- Surety bond guaranteeing performance				✓		
		- Post-closure letter of credit				✓		
		- Post-closure insurance				✓		
		- Financial test and corporate guarantee				✓		
270.14(b) (17)	264.147	- Multiple financial mechanism for one facility				✓		
		- Single financial mechanism for multiple facilities				✓		
		- Documentation of Insurance	✓				p109	p
		- Request for variance from insurance				✓		
		- Insurance for sudden/accidental occurrences	✓				p109	
		- Insurance for nonsudden/accidental occurrences	✓				1-1	
		- Financial test for liability coverage				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b) (18)	264.149	- Documentation of a State Required Financial Mechanism for Closure, Post-Closure, or Liability including				✓		
		- EPA I.D. number				✓		
		- Facility name				✓		
		- Facility address				✓		
		- Amounts of liability coverage or funds assured				✓		
	264.150	- Documentation of State Assumed Responsibility for Closure Post-Closure or Liability including				✓		
		- Letter from State describing State's responsibilities				✓		
		- Facility EPA I.D. number				✓		
		- Facility name				✓		
		- Facility address				✓		
		- Amounts of liability coverage or funds assured				✓		
270.14(b) (19)		- Topographic map showing a distance of 1000 feet around facility at a scale of not more than 1 inch equals 200 feet that clearly shows	✓		✓			p. 20+ ATTACHMENTS NOT ON ONE MAP.
		- Contours			✓			
		- Proper contour intervals			✓			
		- Map scale and date	✓		✓			
		- 100-year flood plain area	✓		✓			
		- Surface waters and intermittent streams			✓			
		- Surrounding land uses	✓		✓			

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(b) (19)		- Wind rose	✓		✓		p. 22	
		- North orientation	✓		✓			
		- Legal boundaries of facility site	✓		✓			
		- Access control	✓		✓			
		- Injection and withdrawal wells onsite and offsite			✓			
		- Buildings and recreation areas		✓				
		- Runoff control systems		✓				
		- Access and internal roads		✓				
		- Storm, sanitary, and process sewerage systems		✓				
		- Loading and unloading areas	✓					
		- Fire control facilities	✓					
		- Barriers for drainage or flood control	✓					
		- Location of past or present operational units and equipment cleanup areas	✓					
270.17		Specific Part B Information Requirements for Surface Impoundments				✓		
270.17(a)		- List of hazardous wastes placed or to be placed in impoundment				✓		
270.17(b)	264.221	- Detailed plans and an engineering report describing				✓		
270.17(b)(1)	264.221(a)	- Liner system construction (new only)				✓		
	264.221(a)(1)	- Material of construction				✓		
		- Chemical properties				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.17(b)(1)		- Physical strength				✓		
		- Thickness				✓		
	264.221(a)(2)	- Foundation design/integrity				✓		
	264.221(a)(3)	- Area covered				✓		
	264.221(a)(1)	- Liner system integrity against (new only)				✓		
		- Internal and external pressure gradients				✓		
		- Contact with waste/leachate				✓		
		- Climatic conditions				✓		
		- Installation stresses				✓		
		- Daily operational stresses				✓		
	264.221(b)	- Liner system exemption including				✓		
		- Nature and quantity of wastes				✓		
		- Alternative design and operation				✓		
		- Impoundment location description				✓		
		- Hydrogeologic setting				✓		
		- Attenuative capacity of materials between impoundment and groundwater and surface water				✓		
		- Documentation of no migration to ground/surface waters at any future time				✓		
270.17(b)(2)	264.221(c)	- Procedures/equipment to prevent overtopping from				✓		
		- Normal operation				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.17(b)(2)	264.221(c)	- Abnormal operation				✓		
		- Overfilling				✓		
		- Wind/wave action				✓		
		- Rainfall				✓		
		- Run-on				✓		
		- Equipment malfunctions				✓		
		- Human error				✓		
270.17(b)(3)	264.221(d)	- Structural integrity of dikes				✓		
270.17(c)	264.222(a)	- Documentation for Part 264, Subpart F exemption including,				✓		
		- Impoundment and liner location above seasonal highwater table				✓		
		- Two liners meeting §264.221(a) requirements				✓		
		- Leak detection system between liners				✓		
270.18		- Specific Part B Information Requirements for Waste Piles				✓		
270.18(a)		- List of hazardous wastes placed or to be placed in each waste pile				✓		
270.18(b)	264.250(c)	- Documentation of general exemption from §264.251 and Part 264, Subpart F, including,				✓		
		- Waste pile protection from precipitation				✓		
		- Procedures for insuring liquids are not placed in pile				✓		
		- Description of run-on controls				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Description of wind dispersal controls other than wetting				✓		
		- Decomposition/reactions do not cause leachate generation				✓		
270.18(c)	264.251(a)	- Detailed plans and an engineering report describing,				✓		
270.18(c)(1)	264.251(a)(1)	- Liner system construction (new only)				✓		
	264.221(a)	- Material of construction				✓		
		- Chemical properties				✓		
		- Physical strength				✓		
		- Thickness				✓		
		- Foundation design/integrity				✓		
		- Area covered				✓		
		- Liner system integrity against (new only)				✓		
		- Internal and external pressure gradients				✓		
		- Contact with waste/leachate				✓		
		- Climatic conditions				✓		
		- Installation stresses				✓		
		- Daily operational stresses				✓		
	264.251(a)(2)	- Leachate collection and removal system to maintain less than one foot of leachate on liner including,				✓		
		- Materials of construction				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.18(c)(1)		- Chemical resistance to waste/leachate				✓		
		- Strength sufficient to prevent collapse				✓		
		- Provisions to prevent clogging				✓		
264.251(b)		- Liner system/leachate system exemption including,				✓		
		- Nature and quantity of wastes				✓		
		- Alternative design and operation				✓		
		- Pile location description				✓		
		- Hydrogeologic setting				✓		
		- Attenuative capacity of materials between pile, ground and surface waters				✓		
		- Documentation of no migration to ground/surface waters at any future time				✓		
270.18(c)(2)	264.251(c)	- System for control of run-on from peak discharge of a 25-year storm				✓		
270.18(c)(3)	264.251(d)	- System for control of run-off water volume of a 24-hour, 25-year storm				✓		
270.18(c)(4)	264.251(e)	- Procedures to manage collection and holding facilities associated with run-on and run-off control systems				✓		
		- Wind dispersal control procedures				✓		
270.18(c)(5)	264.251(f)	- Documentation for Part 264, Subpart F exemption including,				✓		
270.18(d)	264.252(a)	- Pile and liners above seasonal high water table				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.18(d)		- Two liners meeting requirements of §264.251(a)(1)				✓		
		- Leak detection system between liners				✓		
		- Leachate system meeting §264.251(a)(2) requirements				✓		
	264.253(b)	- Documentation for Part 264, Subpart F exemption including,				✓		
		- Pile and liners above seasonal high water table				✓		
		- Liner meets §264.251(a)(1) requirements				✓		
		- Soil characteristics/depths				✓		
		- Leachate system meets §264.251(a)(2) requirements				✓		
		- Schedule/procedures for liner inspection by waste removal				✓		
		- Sufficient liner strength/thickness to allow periodic removal/replacement of wastes				✓		
270.18(f)		- Description of treatment carried out in or on the pile including,				✓		
		- Details of treatment process				✓		
		- Equipment used				✓		
		- Nature and quality of residuals				✓		
270.20		- Specific Part B Information Requirements for Land Treatment Facilities				✓		
270.20(a)		- Description of treatment demonstration plans by				✓		
	264.272(b)	- Field test				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.20(a)		- Laboratory analysis				✓		
		- Available data				✓		
		- Operating data (existing units only)				✓		
		- Submittal for laboratory analyses or field test demonstration permit including,				✓		
		- Documentation of accurate simulation				✓		
		- Wastes and hazardous constituents descriptions (Part 261, Appendix VIII)				✓		
		- Climatologic information				✓		
		- Topographical data				✓		
		- Operating practices				✓		
		- Type of test to be conducted				✓		
264.272(c)		- Test materials and methods				✓		
		- Expected completion time				✓		
		- Statement on appropriateness of demonstration				✓		
		- Statement on human health and environment protection considering,				✓		
		- Characteristics of wastes to be tested				✓		
		- Operating and monitoring during tests				✓		
		- Duration of test				✓		
		- Volume of waste used in test				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	* Location in Application	Comments
		- Potential for hazardous waste migration to ground/surface waters (field tests only)				✓		
270.20(b)	264.271(a)	- Description of land treatment program				✓		
		- Wastes to be land treated				✓		
		- Design measures to maximize treatment including,				✓		
270.20(b)(2)(i)	264.273(a)	- Rate and method of waste application				✓		
		- Soil pH control measures				✓		
		- Microbial/chemical reaction enhancements				✓		
		- Treatment zone moisture control measures				✓		
270.20(b)(3)	264.278(a)-(f)	- Unsaturated zone monitoring procedures including,				✓		
		- List of and rationale for selecting compounds to be monitored				✓		
		- Monitoring equipment, procedures, frequency				✓		
		- Procedures for selecting sampling locations				✓		
		- Sample collection procedures				✓		
		- Sample preservation/shipment procedures				✓		
		- Sample chain of custody control				✓		
		- Sample analysis procedures				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.30(b)(4)		- Background value determination procedures				✓		
		- Statistical methods description				✓		
		- List of hazardous constituents expected to be in, or derived from, wastes to be land treated				✓		
270.20(b)(5)	264.271(e)	- The proposed vertical and horizontal dimensions of the treatment zone with maximum depth of				✓		
		- No more than 5 feet from the initial soil surface				✓		
		- More than 3 feet above the seasonal high water table				✓		
270.20(c)	264.273 (b)-(f)	- Description of land treatment unit design				✓		
		- Procedures/equipment to prevent run-on from peak discharge of 25-year storm				✓		
		- Procedures/equipment to collect and control the run-off water volume from a 24-hour, 25-year storm				✓		
		- Procedures/equipment to minimize run-off from treatment zone during active life				✓		
		- Run-on and run-off collection and control systems management plan				✓		
		- Procedures/equipment for wind dispersal control				✓		
270.20(d)	264.276(a)	- Documentation of request for growth of food-chain crops on treatment zone not receiving cadmium in wastes				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.20(d)	264.276(a)	- Statement that demonstration of no risk to human health will be conducted by,				✓		
		- Field tests				✓		
		- Greenhouse studies				✓		
		- Available data				✓		
		- Operating data (existing only)				✓		
		- Demonstration program description, including				✓		
		- Soil pH				✓		
		- Cation exchange capacity of soil				✓		
		- Specific wastes to be applied				✓		
		- Waste application rates				✓		
		- Waste application methods				✓		
		- Identification of demonstration crops				✓		
		- Planting and growth procedures				✓		
		- Characteristics of crop				✓		
		- Sample selection criteria				✓		
		- Sample collection procedure				✓		
		- Sample size				✓		
		- Analyses methods				✓		
		- Statistical data evaluation procedures				✓		
		- Identification of comparison crops				✓		
		- Characteristics of crop				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.20(d)	264.276(a)	- Planting and growth procedures				✓		
		- Conditions of growth				✓		
		- Sample selection criteria				✓		
		- Sample collection procedures				✓		
		- Sample size				✓		
		- Analyses methods				✓		
		- Statistical data evaluation procedures				✓		
		- Request for a permit to conduct demonstration program				✓		
270.20(e)	264.276(b)	- Documentation of request for growth of food-chain crops on treatment zone if wastes contain cadmium				✓		
		- Cadmium concentration in waste				✓		
		- Soil pH				✓		
		- Annual application of cadmium in kilograms per hectare				✓		
		- Soil cation exchange capacity				✓		
		- Identification of animal feeds to be grown				✓		
		- Plan to prevent animal feed ingestion by humans				✓		
		- Documentation of notice on deed				✓		
270.21		- Specific Part B Information Requirements for Landfills				✓		
270.21(a)		- List of hazardous wastes to be placed in each landfill cell				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.21(b)	264.301(a)	- Detailed plans and an engineering report describing				✓		
270.21(b)(1)	264.301(a)(1)	- Liner system construction (new only)				✓		
		- Material of construction				✓		
		- Chemical properties				✓		
		- Physical strength				✓		
		- Thickness				✓		
		- Foundation design/integrity				✓		
		- Area covered				✓		
		- Liner system integrity against (new only)				✓		
		- Internal and external pressure gradients				✓		
		- Contact with waste/leachate				✓		
		- Climatic conditions				✓		
		- Installation stresses				✓		
		- Daily operational stresses				✓		
	264.301(a)(2)	- Leachate collection and removal system to maintain less than one foot of leachate on liner including,				✓		
		- Materials of construction				✓		
		- Chemical resistance to waste/leachate				✓		
		- Sufficient strength to prevent collapse				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.21(b)(1)	264.301(b)	- Provisions to prevent clogging				✓		
		- Liner system/leachate system exemption including,				✓		
		- Nature and quantity of wastes				✓		
		- Alternative design and operation				✓		
		- Landfill location description				✓		
		- Hydrogeologic setting				✓		
		- Attenuative capacity of materials between landfill and ground and surface waters				✓		
		- Documentation of no migration to ground/surface waters at any future time				✓		
270.21(b)(2)	274.301(c)	- System for control of run-on from peak discharge of a 25-year storm				✓		
270.21(b)(3)	274.301(d)	- System for control of run-off water volume from a 24-hour, 25-year storm				✓		
270.21(b)(4)	274.301(e)	- Procedures to manage collection and holding facilities associated with run-on and run-off control systems				✓		
270.21(b)(5)	274.301(f)	- Wind dispersal control procedures				✓		
270.21(c)	264.302(a)	- Documentation for Part 264, Subpart F exemption including,				✓		
		- Landfill and liners above seasonal high water table				✓		
		- Two liners meeting requirements of §264.301(a)(1)				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Leak detection system between liners				✓		
		- Leachate system meeting §264.301(a)(2) requirements				✓		
270.21(h)	264.314	- Documentation of procedures/equipment for landfilling liquid wastes				✓		
270.21(i)	264.315	- Documentation of procedures/equipment for landfilling containers				✓		
270.14(c)	Part 264 Subpart F	Part B Protection of Ground Water Information Requirements for Surface Impoundments, Waste Piles, Land Treatment Units, and Landfills				✓		
270.14(c)(1)		- Interim status period ground-water monitoring data summary				✓		
270.14(c)(2)		- Identification of uppermost and hydraulically interconnected aquifers under facility including,				✓		
		- Water flow rate and direction				✓		
		- Bases for identification				✓		
270.14(c)(3) and 270.14(b)(19)		- Topographic map				✓		
		- Delineation of property boundary				✓		
	264.93(b)	- Delineation of waste management area				✓		
	264.93(a)	- Delineation of proposed point of compliance				✓		
		- Ground-water monitoring well locations				✓		
		- Location of aquifers				✓		
270.14(c)(4)		- Descriptions of existing contamination				✓		
		- Delineation of plume extent				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Appendix VIII constituents concentrations				✓		
		- Concentrations throughout plume				✓		
		- Maximum concentrations in plume				✓		
270.14(c)(5)	264.97	- Detailed plans and an engineering report of Ground Water Monitoring Program				✓		
	264.97(a)	- Description of wells				✓		
		- Number of wells				✓		
		- Locations				✓		
		- Depths				✓		
		- Assurance of unaffected background water measurement				✓		
		- Assurance of compliance point ground water measurement				✓		
	264.97(c)	- Casing description				✓		
	264.97(d)	- Description of sampling/analysis procedures				✓		
		- Sample collection methods				✓		
		- Sample preservation/shipment				✓		
		- Analytical procedures				✓		
		- Chain of custody control				✓		
	264.97(e)	- Documentation of proper/adequate analytical procedures				✓		
	264.97(f)	- Procedure for determination of ground water elevation with each sample				✓		
270.14(c)(6)	264.91(a)(4) and 264.98	- Description of Detection Monitoring Program including,				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Post-closure period				✓		
	264.98(e)	- Procedure for annual determination of uppermost aquifer flow rate and direction				✓		
	264.98(f) & 264.97(d)&(e)	- Documentation of sample collection and analysis procedures				✓		
	264.98(g)	- Procedure for determining a statistically significant increase for any monitored parameter or constituent by				✓		
		- Comparing compliance point data to background value data using the procedures in §264.97(h)(1) or (2), and				✓		
		- Providing an estimate of the time period after sampling completion necessary to obtain results				✓		
270.14(c)(6)	264.98(h)	- Procedure to be implemented if a statistically significant increase in any constituent or parameter is identified at any compliance point monitoring well, including				✓		
	264.98(h)(1)	- Written notification to Regional Administrator				✓		
	264.98(h)(2)	- Sample collection and analysis methods for all Appendix VIII constituents at all monitoring wells				✓		
	264.98(h)(3)	- Method for establishing Appendix VIII constituent background values				✓		
	264.98(h)(4)	- Preparation of an application for permit modification to establish compliance monitoring				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(c)(6)(i)	264.93 and 264.98(a)	- List of indicator parameters, waste constituents, reaction products to be monitored for, including				✓ *		
		- Type, quantities, concentrations expected in wastes				✓		
		- Mobility, stability, persistence in unsaturated zone				✓		
		- Detectability in ground-water				✓		
270.14(c)(6)(iii)	264.98(a)(4) and 264.98(c)(1)	- Background ground-water concentration values and coefficients of variation established by				✓		
	264.98(c)(3)	- Use of an appropriate ground water monitoring system, and				✓		
	264.97(g)(1)	- Quarterly sampling of upgradient wells for one year, or				✓		
	264.97(g)(3)	- Quarterly sampling of other wells for one year, and				✓		
	264.97(g)(4)	- Data from a minimum of one sample/well and minimum of four samples per quarter, or				✓		
		- Presentation of procedures to calculate such values				✓		
270.14(c)(6)(ii)	264.98(b)	- Description of an appropriate ground-water monitoring system to be installed at the compliance point				✓		
270.14(c)(6)(iv)	264.98(d)	- Procedures for collecting semi-annual ground-water samples at the compliance point during				✓		
		- Active life				✓		
		- Closure period				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(c)(7)	264.91(a)(1) and 264.99	- Description of Compliance Monitoring Program, including				✓		
		- List of wastes previously handled at facility				✓		
		- Characterization of contaminated ground- water				✓		
		- Hazardous constituents identified				✓		
		- Hazardous constituents concentrations				✓		
	264.99(b)	- Description of compliance monitoring system at the compliance point				✓		
		- List of hazardous constituents to be compliance monitored				✓		
	264.96	- Proposed compliance period				✓		
	264.99(d)	- Procedure for collecting quarterly samples at compliance point during compliance period				✓		
	264.99(c)(3)	- Procedures for establishing background concentration values for constituents that are based on				✓		
		- Use of an appropriate ground-water monitoring system, and				✓		
	264.97(g)	- Data that is available prior to permit issuance				✓		
		- Data that accounts for measurement errors in sampling and analysis				✓		
		- Data that accounts for seasonal ground-water quality fluctuations				✓		
		- Data from a minimum of one sample per well and a minimum of four samples from monitoring system, each time system is sampled				✓		

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
270.14(c)(7) (i)(9)	264.92 and 264.99(c) (1),(2)	- Proposed concentration limits for constituents with justification based on				✓		
		- §264.94(a)(1) and §264.97(g)				✓		
		- §264.94(a)(2)				✓		
	264.99(e)	- §264.94(b) and §264.99(c)(1)				✓		
		- Procedure for annual determination of uppermost aquifer flow rate and direction				✓		
		- Procedures for annual testing of all compliance point wells for Appendix VIII constituents				✓		
		- Documentation of all sampling and analysis procedures				✓		
		- Procedures for determining a statistically significant increase for any monitored constituent by				✓		
	264.99(h)	- Comparing compliance point data to the concentration limit using the procedure in §264.97(h)(2)				✓		
		- Providing an estimate of the time period after sampling completion necessary to obtain results				✓		
		- Procedures to be implemented if the ground-water protection standard is exceeded at any compliance point monitoring well, including				✓		
	264.99(i)	- Written notification to Regional Administrator				✓		
	264.99(i)(1)	- Preparation of an application for permit modification to establish a corrective action program, including				✓		
	264.99(i)(2)							

Part 270	Part 264	Subject Requirement	Provided	Not Provided	Inadequate	Not Applicable	Location in Application	Comments
		- Details of program to comply with ground-water protection standard				✓		
270.14(c)(7)(v)	264.99(i)(2)(ii)	- Details of ground-water monitoring to demonstrate effectiveness of program				✓		
270.14(c)(8)	264.91(a)(2) and 264.100	- Description of Corrective Action Program, including				✓		
270.14(c)(8)(i)		- Characterization of contaminated ground-water				✓		
	264.100(a)(1)	- Identified hazardous constituents				✓		
		- Concentrations of hazardous constituents				✓		
270.14(c)(8)(ii)	264.100(a)(2)	- Concentration limit for each hazardous constituent				✓		
270.14(c)(8)(iii)	264.100(b)	- Detailed plan and an engineering report describing the corrective actions to be taken at the compliance point				✓		
	264.100(c)	- Time period necessary to implement corrective action program				✓		
270.14(c)(8)(iv)	264.100(d)	- Description of ground-water monitoring program that will be sufficient to assess the adequacy of corrective action				✓		
	264.91(a)(3) and 264.100(e)	- Description of the corrective action to be taken for constituents in ground-water between compliance point and downgradient facility boundary				✓		
	264.100(g)	- Procedure and content for semi-annually submitting written reports to the Regional Administrator on program effectiveness				✓		
Part B Certification and Signatories								
270.11(d)		- Certification paragraph	✓				P3	
270.11(a)		- Appropriate signatory	✓				P3	

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INDIANAPOLIS, INDIANA 46204-2454

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March 1, 1985

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PAUL N. ROWE
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OF COUNSEL

RECEIVED
MAR 05 1985

WMD-RAIU
EPA, REGION V

RCRA Activities
Part B Permit Application
United States Environmental
Protection Agency
P. O. Box A3587
Chicago, Illinois 60690-3587

Attention: Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Re: Part B Application of
Rock Island Refining Corporation
5000 West 86th Street
Indianapolis, Indiana 46268
IND006417430

Dear Mr. Klepitsch:

Enclosed are the original and three copies of
pages 22 and 23 that were inadvertently omitted from Rock
Island Refining Corporation's February 28, 1985, Part B
application.

Very truly yours,


George W. Pendygraft

GWP/lh
Enclosures
cc w/o enc.: Mr. William E. Laque

288-4

GCPV2

MAY 3 1985

5HS-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

William Laque
Environmental Coordinator
Rock Island Refining Corporation
Post Office Box 68007
Indianapolis, Indiana 46268

RE: Corrective Action Requirements,
Hazardous and Solid Waste
Amendments of 1984
Rock Island Refining Corporation
IND 006417430

Dear Mr. Laque:

As you know, we are currently reviewing Part B of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility.

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the Amendments) were enacted to modify RCRA. Under Section 206 (copy enclosed) of the Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken, pursuant to a RCRA permit. An important part of our determination includes your willingness (or unwillingness) to sign the enclosed certification statement. Please read it carefully and either sign it and return it, or return it to us unsigned with a cover letter of explanation, within three weeks of the date of this letter. Any information regarding releases of hazardous waste or hazardous constituents to the environment will be evaluated during the permit review process. Any tentative decision we make concerning your permit application will be public noticed in a newspaper of general circulation in the area of the facility.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours,

Karl J. Klepitsch, Jr.

Karl J. Klepitsch, Jr.
Chief, Solid Waste Branch

Enclosures

INITIALS

DATE

TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
<i>VP</i>	<i>Carl</i>	<i>hul.</i>	<i>hul.</i>	<i>hul.</i>	<i>hul.</i>	<i>hul.</i>	<i>hul.</i>
<i>4/3/85</i>	<i>active</i>	<i>4/20/85</i>			<i>5/7/85</i>	<i>5/7/85</i>	

16 MAY 1985

William Laguer
Environmental Coordinator
Rock Island Refining Corporation
5000 West 36th Street
Indianapolis, Indiana 46250

RE: RCRA Permit Application
Rock Island Refining Corporation
ID# 006417430

Dear Mr. Laguer:

Thank you for the Part B permit application submitted for the hazardous waste activities at the above referenced facility. The application has been initially reviewed for completeness pursuant to the regulatory requirements given in 40 CFR Parts 264, and 270.

Our review indicates there are informational requirements which have not been addressed in your application. Enclosed is an attachment which delineates the specific omissions. This information must be submitted before the application can be considered to be complete. Upon receipt of this information, we will continue review of your application. The submission is due 45 days from the date of this letter.

Please contact Mr. Roy Vogelius of my staff, at (312) 836-1673, if you have questions concerning this matter.

Sincerely yours,

Edith M. Ardiente, P.E.
Chief, Technical Programs Section

Attachment

6HS/Vogelius:vc

4/12/85

INITIALS	DATE	TYPYST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	WMB CHIEF	WMD DIRECTOR
		5/1/85	3-May-85 RHW	CHIEF 5/1/85			CHIEF 5/1/85	

Rock Island Refinery Corporation
Notice of Deficiency
ID# 006417430

- I. Before addressing the specific deficient or omitted items, it seems prudent to clarify the status of the Rock Island Refinery's wastes vis-a-vis the pertinent Federal Regulations. These wastes appearing on Rock Island's original Part A are, and always have been, hazardous wastes. Although an informal delisting for three of Rock Island's listed wastes (K049, K050, and K051) was granted by the Office of Solid Waste in letters to Region V, Rock Island, and the Indiana State Board of Health dated respectively March 11, 1982; March 12, 1982; and June 10, 1982; a temporary delisting was never published in the Federal Register. Due to the fact that informal delistings have no statutory basis, these letters therefore have no force of law and in no way effect the regulation of these wastes. Consequently, the provisional variance granted by the Indiana State Board of Health for the slug oil emulsion solids (K049), heat exchanger bundle cleaning sludges (K050), and API separator sludge (K051) on February 7, 1983 was void upon issuance pursuant to that variance's condition #3 because no such federal exclusion ever existed. The U.S. EPA apologizes for any confusion caused by the informal delisting. It should be noted that in a phone conversation on March 20, 1985, Mr. Lague, Rock Island's environmental coordinator, stated to Mr. Fogelius of the regional staff that the corporation continues to treat these three wastes as hazardous wastes; such treatment is required unless and until a temporary or formal delisting is published in the Federal Register (see §260.20(e) and 260.22(n)).
- II. The Land Application Area indicated on the refinery's original Part A, dated November 18, 1980, also needs to be addressed. According to the information included in Form 3, Section III and Attachment A of the original Part A application, Rock Island's Land Application Area was in existence on November 18, 1980. Subsequent to that date, solids resulting from the treatment of listed hazardous wastes were land disposed; pursuant to §261.2(c) and (d) this is land application of hazardous waste and as such is subject to §265 until final disposition of the permit application is made. The permit itself will require compliance with the §265 regulations. If you are not seeking a permit for this unit, it must be closed in accordance with §265.
- III. Wastewater produced from the vacuum filter also results from the treatment of a hazardous waste and again by §261.3(c) and (d) is itself a hazardous waste. This water becomes excluded from the RCRA permit regulations as it enters the sewage system; this effluent is then regulated under NPDES permit. However, between the vacuum filter and sewer the water is regulated as a hazardous waste and therefore the aeration lagoons are subject to all RCRA requirements for surface impoundments.

IV. Part A Deficiencies

1. As discussed in items I through III above, the activities conducted by the applicant which require it to obtain a permit under RCRA have not all been included in the revised Part A (4270.13 (a)).

Clarify whether 902 code includes design capacity of both sludge holding tanks and suction pits.

Clarify whether the second T01 code refers to the vacuum filter, and, if so, why the capacity has been revised downward. If not, why is no T04 code listed?

The Oil land application area is still part of the facility's hazardous waste activity and should be included on the revised Part A, whether the process is still used or not. (See II above).

The basic sediment and water ponds (T05) also are still regulated. Both the BSAW ponds and land application area must remain on the permit application until they are officially closed.

As mentioned in item III above, the aeration lagoons (T02) should also appear on the revised Part A.

2. Topographic Map

All hazardous waste management units should be located on the topographic map, the intake and discharge structures should be identified, the direction of current on Oil Creek should be shown, and the latitude given. (4270.13 (1)).

3. Photographs (Attachment B.VI) of the facility do not clearly delineate all existing structures, existing treatment, storage, and disposal areas, and sites of future treatment, storage, and disposal areas, and are illegible. (4270.13 (b) (2)).

4. Identify who issued the permits listed in attachment A and what these permits cover.

5. The process codes and design capacities section (Form 3, III.A) must be carefully and completely filled out (see items I to III and IV.1 above).

6. Include a statement explaining why RCRA wastes are being removed from the revised Part A (4270.13 (c)).

7. Explain what is stored in the drum storage area shown on the facility map.

V. Part A Requirements

1. All of the waste analyses (ps 115-128) are not identified. Are they all from the filter cake? Analyses should be done on all types of managed hazardous waste prior to treatment, storage, or disposal. (§270.14(b)(2)).

2. Waste Analysis Plan (Appendix A, page 116). The plan should be revised to include analysis parameters with rationale, the procedure for collecting representative samples, and the frequency of analysis. (§270.14(b)(1)-(5)).

3. Security Description

- Supply the supervisory personnel's schedule as evidence of 24 hour, 365 day surveillance.
- Provide an adequate description of the dikes and berms mentioned on page 43.
- Provide in detail a description of the warning signs, statement of 25-foot visibility, and the exact location of signs.

4. General Inspection Schedule

- Provide a statement as to where, exactly, the inspection schedule and inspection reports will be kept (§264.15(b)(7) and 264.15(d)).
- Provide a remedial action schedule. (§264.15(a)).
- Include the aeration lagoons and basin sediment and water ponds in the inspection schedule (§264.15(a) and 264.225).
- Include the land application area in the inspection schedule (§264.15(a) and 264.273(a)).

1. Preparedness and Prevention (§270.14(b)(6)).

- Describe the two-way communication system, e.g. number of devices, locations, accessibility, etc. (§264.32(a) and 264.34(a)).
- Document personnel access to the external communication system (§264.33(b)).
- Provide the number and location of fire extinguishers and decontamination equipment.
- Document the volume of water and water pressure available for fire control. (§264.32(b)).
- Include aisle width and width of widest emergency vehicle (§264.35).
- Provide documentation of emergency arrangements with local authorities (§264.37(c)). Only the descriptions of these arrangements were provided.

Contingency Plan

- Provide specific criteria for the implementation of the contingency plan (§264.52(a)).
- Provide documentation showing the qualifications and authority of those designated as emergency coordinators (§264.55).
- Provide a detailed list of emergency equipment, documentation of equipment location, physical description of equipment, and a statement of equipment capabilities (§264.52(a)).
- Provide specific criteria for the implementation of the evacuation plan (§264.52(f)), and alternate evacuation routes in the event the primary routes are blocked.
- Supply the location of the facility's copy of the contingency plan and the number and location of alternate copies (§264.53).
- Include all information pertinent to amending the contingency plan (§264.54).

7. Detailed Emergency Procedures

- Provide a description of cleanup procedures and associated material testing, material treating, storage procedures, emergency equipment decontamination and refitting procedures, and description of procedures to ensure incompatible waste segregation during clean-up (§270.14(b)).
- Specify the procedure to be used to assess environmental and human health hazards during an emergency (§270.14(b)(7), 264.56).

8. Specify Contingency Plan Requirements, for Surface Impoundments.

None of these requirements have been addressed:

- Procedure for stopping waste addition
- Procedure for containing leaking
- Procedure to prevent catastrophic failure
- Procedure for emptying the impoundment
- Procedure for recertifying and reactivating impoundment
- Procedure for closing impoundment
(See, §§270.14(b)(f), 270.17(f) and 264.227).

9. Preventive Procedures, Structures, and Equipment.

Describe the equipment and procedures to be used to prevent run-off and flooding. Also, explain what steps will be taken to mitigate equipment failure and power outages (§270.14(b)(8)).

10. Traffic Patterns. Provide a detailed documentation of waste movement routes, number of movements by type of vehicles, quantity of waste per movement per vehicle, and traffic control signals (§270.14(b)(10)).

11. Personnel Training Program Documentation.

Supply a brief description of how the training program meets actual tasks as well as a description of records to be kept, their location, and procedures to ensure they are retained for the proper length of time (§270.14(b)(12)).

12. Closure Plan Documentation

- ° Provide a description of the maximum unclosed portion during facility life. List trackable intervening closure activities, the location and number of copies of the closure plan, provide an identification of the person responsible for storage and updating the facility copy of the closure plan, and give the procedure for updating all other copies of the closure plan (5270.14(b)(13)).

13. Closure Plan Requirements for Surface Impoundments

- ° Provide all information required under (5270.14(b)(13)), 270.17(g), 264.112, and 264.220(a) for the basic sediment and water ponds, aeration, lagoons, and suction pits.

14. Closure Plan Requirements for Land Treatment Facilities

- ° Provide all information required under (5270.14(b)(13)), 270.20(f), 264.112, and 264.280(a) for the land application area.

15. Post Closure Plan Documentation

- ° Provide all information required under 5270.14(b)(13), 264.117, 264.118. Be sure to include the information relevant to the surface impoundments (5270.17(g), 264.220(f)), and land treatment area (5270.20(f), 264.280(c)).

16. Pursuant to (5270.14(b)(14) and 264.13(i), documentation should be provided to show that a notice has been placed on the facility's deed indicating that the land has been used to manage hazardous waste.

17. Provide a Post-Closure cost estimate ((5270.14(b)(15), 264.144 through 264.146, and 264.151).

18. Provide documentation of insurance for nonoccident accidents ((5270.14(b)(17), 264.147 and 264.151).

19. Submit a detailed topographic map containing all of the items required by 5270.14(b)(19).

20. Provide the specific Part A requirements for surface impoundments ((5270.17, 264.221).

21. Provide the specific Part B requirements for land treatment facilities ((5270.20, 264.272).

22. Resubmit the certification paragraph using the revised format (July 1, 1994) of 5270.11(4), and provide information assuring that the signatory meets the criteria of 5270.11(a)(1)(i) or (ii).

FILE

17 MAY 1985

5HS-13

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

William Laque
Rock Island Refining Corporation
Environmental Coordinator
Post Office Box 68007
Indianapolis, Indiana 46268

Re: Additional New Requirements
Hazardous and Solid Waste
Amendments of 1984 (HSWA)

Rock Island Refining Corporation
IND 006417430

Dear

Mr. Laque:

On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (HSWA) were signed into law. These Amendments add a number of requirements for your facility which must be addressed before we can issue a permit. A formal request for the submittal of Part B of the Resource Conservation and Recovery Act (RCRA) permit application for treatment, storage, or disposal of hazardous waste had already been made for the above-referenced facility.

The purpose of this letter is to notify you that your RCRA Part B Permit Application must be revised to incorporate the requirements of the Hazardous and Solid Waste Amendments of 1984. The revisions to your Part B application should be submitted no later than August 8, 1985.

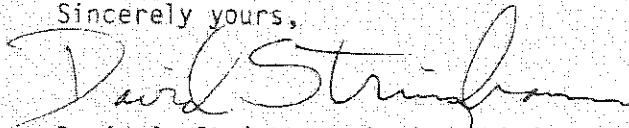
This request for a revision to your RCRA Part B permit application and the associated due date of August 8, 1985, for submitting your revisions are related only to the new requirements brought about by the 1984 Amendments. In the meantime, the review and processing of the Part B application you have already submitted will continue and you may be required to make corrections and revisions to your original Part B application that will need to be submitted prior to August 8, 1985.

228-12

Enclosed, for your information, is a fact sheet, a brief guidance document, and a copy of selected statute sections on the new requirements. I urge you to examine the enclosures as soon as possible, because target dates under HSWA begin as early as May 8, 1985. For two of the new requirements, exposure assessments and the double liner requirements, additional guidance being developed by EPA Headquarters will be provided to land disposal permit applicants as soon as they become available.

Please contact the previously identified permit writer with our Agency for additional information.

Sincerely yours,



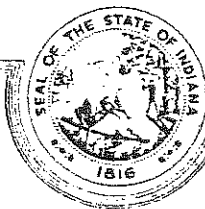
David A. Stringham, Acting Chief
Solid Waste Branch

Enclosures

	TYPYST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF	WMB CHIEF	WMD DIRECTOR
INITIALS	5/16/85		HC			MMW	DAS	
DATE	5/16/85		5/17/85			5/22	5/24	

STATE OF INDIANA

STREAM POLLUTION CONTROL BOARD



INDIANAPOLIS 46206

1330 West Michigan Street

August 5, 1981

Mr. William E. Laque
Environmental Coordinator
Rock Island Refining Corporation
P.O. Box 68007
Indianapolis, IN 46268

Dear Mr. Laque:

This agency has reviewed your proposal for land application of oily material from the Rock Island Refining Corporation's east and west basic sediments and water ponds.

Application of this material is to be a one-time application and, according to information supplied by your Corporation, material to be applied should not appreciably increase the soil concentration of lead or chromium after incorporation. Therefore, land application of the material is not expected by your Corporation to affect characteristics of stormwater runoff from the application site.

Based on the above, this agency does not believe that this land application proposal warrants a modification of the NPDES permit for your facility.

However, since there is at least a possibility that storm water runoff from this area may be contaminated, this agency requests that, after the initial land application of material from the basic sediments and water pond, the storm water that accumulates shall be sampled as outlined below before being discharged to the receiving stream. A grab sample of the storm water shall be analyzed for oil and grease, total copper, total chromium, total lead, total selenium, and total cyanide. These are the only constituents of the material to be applied that pose a potential of adverse water quality impact if present in the runoff. A representative diked area that received material from the west basic sediments and water pond shall be sampled and analyzed for all effluent parameters except for selenium, which shall be sampled and analyzed for from an area receiving the material contained in the east basic sediment and water pond.

The analyses shall be submitted to this office for this agency's approval prior to discharge. After this agency grants approval for discharge, then the water may be discharged from all diked areas without further sampling.

Mr. William E. Laque

-2-

August 5, 1981

After the initial discharge is approved, the subsequent storm water may be discharged without being sampled. However, every three months after the initial discharge, samples shall be taken and analyzed as described above. This quarterly sampling shall continue for one year from the date of land application. This agency will review the results as they are submitted to this office and may make changes in these monitoring requirements or may initiate a modification of the permit if deemed necessary. Sampling results shall be submitted to the Permits and Approvals Section of the Division of Water Pollution Control, Indiana State Board of Health.

Very truly yours,



Ralph C. Pickard
Acting Technical Secretary

RStrong/reg

cc: George Pendygraft



ROCK ISLAND REFINING
Corporation

[Handwritten signature]
[Handwritten signature]

File in Rock Island
Indust. File
APR 28 8 05 AM '81

SANITARY ENGINEERING
STATE BOARD OF HEALTH

April 28, 1981

Mr. Ralph Pickard,
Technical Secretary
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46202

Re: Rock Island Land Application Project,
Marion County

Dear Mr. Pickard:

On November 18, 1980, the Technical Secretary for the Indiana Environmental Management Board issued Construction Plan Permit SW242 (the "Construction Permit") for land treatment at the Rock Island Refining Corporation ("Rock Island") plant located at 5000 West 86th Street, Indianapolis, Indiana. On December 18, 1980, representatives of Rock Island and its consultant, Atec Associates, Inc., met with Solid Waste Management Section staff to discuss those conditions in the Construction Permit which needed further definition. At this meeting, staff specified that the location for the ground water monitoring wells and pressure vacuum lysimeters would be required for area #1, the area which would receive materials on a continuing basis. For the remaining area (areas 2 through 17), which are to be used on a one-time basis only for application of oily materials now contained in Rock Island's basic sediments and water ponds (the BS&W materials), the staff confirmed that no ground water monitoring wells or lysimeters were necessary.

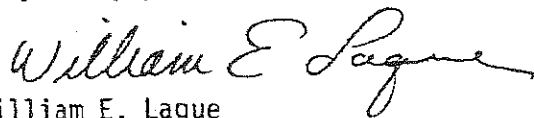
Prior to land application in the areas receiving BS&W materials only, the staff indicated and later confirmed by letter of January 20, 1981 that analyses for chromium (hexavalent), cadmium, lead, selenium and pH are required for soil borings 7, 9 and 12 (described in Attachment 2 of the supplemental materials provided the Solid Waste Management Section by Rock Island on October 23, 1980). Completion of sampling and testing will be completed in the next few weeks. The results will be forwarded to the Solid Waste Management staff promptly.

Mr. Ralph Pickard,
Technical Secretary
4-28-81
-2-

It is advantageous to begin land application of the BS&W materials as soon as possible and, therefore, Rock Island requests issuance of an operating permit for areas 2 through 17.

Should questions arise or additional information be needed, please call the undersigned at your earliest convenience.

Very truly yours,



William E. Laque
Environmental Coordinator

WEL/mhj

cc: Mr. David Lamm
Mr. Bruce Palin
Ms. Karyl Schmidt
Mr. George Pendygraft, Baker/Daniels

STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: October 21, 1980

TO: Rock Island Refinery Files
Marion County

THRU:

FROM: Bruce Palin *BWP*

SUBJECT: Public Notice of Intent to Issue
a Permit

On October 15, 1980, I met with Mr. George Pendygraft and Mr. Bill Laque concerning a proposal they are developing for a land application project for Rock Island Refinery. During our meeting I mentioned the potential need for a public notice of intent to issue a permit for their project. Such a requirement would put the issuance of a permit past the November 19, 1980, deadline for existing facilities to receive interim authorization from the U.S. EPA. Mr. Pendygraft stated he had attended the September Environmental Management Board Meeting and it was his understanding any facility with an application submitted prior to the EMB meeting, September 19, 1980, would not be public noticed. I told him I thought it was September 1, 1980, the effective date of the law. I also questioned whether their letter, dated September 9, 1980, would be considered an application. I told them I would get an interpretation from Mr. Pickard.

That afternoon I met with Mr. Pickard and related the situation to him and showed him Rock Island's "application" letter. Mr. Pickard seemed to recall the cutoff date was September 1, but he would check with his secretary the next morning to see what she had in her notes on the minutes of the meeting. However, he felt that the Board was addressing the public notice requirements in relation to hazardous waste landfill sites and that the Rock Island proposal did not fall into that category and, therefore, would not be subject to public notice.

On October 16, 1980, Mr. Pickard called me and told me the EMB minutes indicated that September 1 was the cut off date the Board agreed upon.

BHPalin/le

STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: September 11, 1980

TO: Files

THRU:

FROM: David D. Lamm

SUBJECT: Rock Island Refinery/Land Application Proposal

On September 5, 1980 I met with Jo Carney and George Pendygast of Baker & Daniels and Bill Laque of Rock Island relative to the above.

The refinery has 2 lagoons on site they want to clean out. Material is presently being pumped and hauled to ILWD. At some point in the very near future it will be necessary for them to deal with the disposal of the sides, bottoms, etc.

What they initially proposed was a landfarming proposal (following format of Mt. Vernon) that they would close out by November 15, 1980. After that date, material would be removed on a more continuous basis obviating the need for any lagooning.

The lagoons (basic sediments and wastewater) presently contain waste materials from:

- 1.) DAF devices
- 2.) API separator sludge
- 3.) cooling tower blowdown

They originally thought that they could get some sort of non-object letter to this proposal. However, after pointing out that the EMA amendments were in effect that proposal wasn't viable. (there was of course some legal maneuvering to try and point out that since the regs weren't developed they could continue as they wanted)

At any rate, it now appears that they will develop a landfarming program similar to Farm Bureaus and submit that ASAP. I advised them that it would be necessary to contact Karyl Schmidt for input on the geologic requirements necessary.

DDL/dg

cc: Karyl Schmidt
Guinn Doyle ✓
Bruce Palin

Handwritten:
Please file
in Rock
Island Refinery file

BAKER & DANIELS

810 FLETCHER TRUST BUILDING
INDIANAPOLIS, INDIANA 46204

317-636-4535

WASHINGTON OFFICE:
SUITE 550 SOUTH 1800 M STREET N.W.
WASHINGTON, D.C. 20036
202-755-1565

ALBERT BAKER
1874-1942

KARL J. STIFFER
JOHN D. COCHRAN
STROM F. HOLLETT
DAN R. WINGFIELD
CHARLES L. WHISTLER
EARL CLAY ULEN, JR.
RICHARD E. ALKMAN
J. B. KING
STEPHEN W. TERRY, JR.
THOMAS M. LOFTON
JOSEPH B. CARNEY
DANIEL E. JOHNSON
ROBERT L. JESSUP
VERDIL L. BEHKE
WILLIAM P. LANDERS, JR.
ROBERT K. DAVIS
RICHARD M. LEAGER
THEODORE E. DORR
MICHAEL R. MAINE
PETER C. WARD
NORMAN P. ROWE
THEWILL D. ALBRIGHT
WILSON S. STODER

EDWARD DANIELS
1877-1912

FRED E. SCHLEGEL
JAMES A. ASCHLEMAN
JERRY K. JACKINS
STEPHEN A. CLAFFEY
PETER D. SCHILLER
NORMAN G. TABLER, JR.
ROBT O'BRYEN
STEPHEN E. PAUL
CHARLES T. RICHARDSON
MICHAEL J. HUSTON
JAMES H. HEFFERNAN
LEWIS D. BECKWITH
DONALD P. BENNETT
THOMAS G. SLATTON
JOE C. EMMERSON
JAMES M. CARR
JAMES H. HAM III
MARY E. LISHNER
DAVID M. SHANE
ROBERT D. SWICKER, JR.
GEORGE W. PENDYGRAFT
ROBERT W. RIZER
JOHN W. PURCELL

JOSEPH DANIELS
1884-1878

THOMAS A. VOOTER
DAVID C. WOODRILL
THEODORE J. ESPINO
MARK B. BARNES
FRANCKA A. BLOCHY
RALPH F. HALL
JOHN B. POLLEY
JOHN B. BRIDGE
BRIAN E. BUEKE
THEODORE W. BROWNE II
ROBERT F. CHAMBERS
STEVEN I. ROUSEHOLDEN
J. DANIEL OGBURN
TUDOR D. KLOPFER
HARRY P. McBRIDE, JR.
GEORGE M. FLEWIS
GEORGE W. SOMERS

PAUL R. BOWS
OF COUNSEL

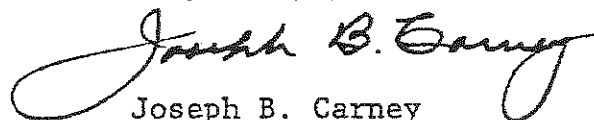
September 9, 1980

Mr. Ralph C. Pickard
Technical Secretary
Indiana Environmental Management
Board
1330 West Michigan Street
Indianapolis, Indiana 46202

Dear Mr. Pickard:

Rock Island Refining Corporation wishes to apply for a permit to land treat some of the wastes from its refining operation in Marion County, Indiana. We have discussed this matter with David Lamm, Chief, Solid Waste Management Section, and enclose the application in the form he suggested. In that discussion we realized that it is very important to Rock Island to have this permit as soon as possible because of the impact of the Resource Conservation and Recovery Act ("RCRA") and its implementing regulations. As a result Rock Island will provide promptly any additional information you may need. Also, George Pendygraft and I are available to respond to any questions you have. We appreciate your assistance in obtaining timely approval.

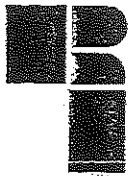
Very truly yours,


Joseph B. Carney

JBC:am

Enclosure

cc: William E. Laque
David Lamm w/enclosure



ROCK ISLAND REFINING
Corporation

12

6/15

September 9, 1980

Mr. Ralph C. Pickard
Technical Secretary
Indiana Environmental Management
Board
1330 West Michigan Street
Indianapolis, Indiana 46202

Re: Application For Provisional Permit For
Land Treatment At Rock Island Refining
Corporation

Dear Mr. Pickard:

Rock Island Refining Corporation, an Indiana corporation ("Rock Island"), 5000 West 86th Street, Indianapolis, Indiana, owns and operates a petroleum refinery in Marion County, Indiana. In the normal course of its petroleum refining operations, Rock Island generates materials variously described as slop oil emulsion solids, heat exchanger bundle cleaning sludges, API separator sludges and leaded tank bottoms. Some of these materials have been stored in diked lagoons, known as basic sediments and wastewater ponds ("BS&Ws"). The recoverable oil has been skimmed off the top and recycled and the heavier portions have accumulated. Rock Island has two such BS&Ws, an "East BS&W" of about one-half acre in size and a "West BS&W" of about one-third of an acre.

The options available for treating or disposing of materials in the BS&Ws and those additional materials continually generated by the refining operations are very limited. Based on its review of those options and discussion with outside consultants, Rock Island has concluded that land application of these materials is the best feasible method of treatment. In land treatment the materials will be applied to the land in appropriate amounts, depending on the content of the materials, and appropriate safeguards will be employed, if necessary, to avoid any danger to the environment. Mostly, however, the hydrocarbons in these materials biodegrade by exposure to the natural soil microorganisms (bacteria). It is the intention of Rock Island to land treat both the material now in the BS&Ws and the material after it is generated in the future.

Ralph C. Pickard

Page 2

September 9, 1980

Having recognized that land treatment is the most practical approach, Rock Island preliminarily reviewed possible sites for such disposal. In this review Rock Island considered the effect on the site, the drainage through or near the site, the energy requirements necessary to transport the materials to the site and other pertinent factors. It appears to Rock Island that its own site, that is, the land in and around the refinery, including the large tank farm, is suitable and the most practical location. As a result, without undertaking to determine whether these materials are hazardous wastes within the meaning of Indiana law, Rock Island makes application for a provisional permit for land treatment at its plant site in Marion County, Indiana, pursuant to Indiana Acts of 1980, Public Law 103. In order to facilitate the prompt consideration of this permit application, Rock Island will submit the necessary technical reports, and a comprehensive description of the complete proposal, as soon as each becomes available.

We are being assisted in this application by our attorneys, Baker & Daniels, and you are welcome to call on either Joe Carney or George Pendency of that office if you have questions. If there are additional factual matters needed, please telephone the undersigned.

Respectfully submitted,

ROCK ISLAND REFINING
CORPORATION

By William E. Laque
William E. Laque
Environmental Coordinator

cc: David D. Lamm
Indiana State Board of Health
Solid Waste Management Section, Rm. A302
1330 West Michigan Street
Indianapolis, Indiana 46206

Joseph B. Carney
810 Fletcher Trust Building
Indianapolis, Indiana 46204
317/636-4535

PART B DOCKET LOG

Please print

Facility ROCK ISLAND REF CORPID # IND 006 417 430

<u>Item #</u>	<u>Item Date</u>	<u>Description</u>	<u>Item Filed *</u>
<u>298-1</u>		<u>LOG</u>	<u>Sec 1</u>
<u>298-2</u>	<u>28-Feb-85</u>	<u>Part B</u>	<u>Folder 2</u>
<u>298-3</u>	<u>28-Feb-85</u>	<u>Part B check in form</u>	<u>Sec 2</u>
<u>298-4</u>	<u>28-Feb-85</u>	<u>Pages 23+24 'Subsequent'</u>	<u>2 B.1.1</u>
<u>298-5</u>	<u>12-Mar-82</u>	<u>Letter to Legue granting Voluntary Exclusion</u>	<u>2 B.1.6</u>
<u>298-6</u>	<u>6-Jan-84</u>	<u>Letter to Legue requesting more info re. delisting</u>	<u>2 B.1.6</u>
<u>298-7</u>	<u>9-April-85</u>	<u>15BH NOD</u>	<u>4 B.1.1</u>
<u>298-8</u>	<u>23-April-85</u>	<u>15BH Site transferred</u>	<u>2</u>
<u>298-9</u>	<u>12-April-85</u>	<u>Part B Checklist</u>	<u>Unattached & file</u>
<u>298-10</u>	<u>16-May-85</u>	<u>NOD</u>	<u>4 3.1.1</u>
<u>298-11</u>	<u>3-May-85</u>	<u>Corrective Action Requirements</u>	<u>2 B.1.1</u>
<u>298-12</u>	<u>17-May-85</u>	<u>Add'l new HSWA Requirements</u>	<u>2 B.1.1</u>
<u>298-13</u>	<u>9-May-85</u>	<u>Report to Execut. Com. Action Reg. Deadline</u>	<u>2 D.1.2</u>
<u>298-14</u>	<u>13-June-85</u>	<u>Extension of Deadline granted</u>	<u>2 D.1.2</u>
<u>298-15</u>	<u>26-June-85</u>	<u>15BH Site Inspection</u>	<u>2 C.2</u>
<u>298-16</u>	<u>17-June-85</u>	<u>Corrective Action Response</u>	<u>2 B.1.1</u>
<u>298-17</u>	<u>3-July-85</u>	<u>Corrective Action Response Review</u>	<u>2 D.1.2</u>
<u>298-18</u>	<u>24-July-85</u>	<u>Delisting of Haz. Waste in Indiana</u>	<u>2</u>
<u>298-19</u>	<u>12-July-85</u>	<u>Add'l Compliance check request</u>	<u>2 B.1.1</u>
<u>298-20</u>	<u>5-Aug-85</u>	<u>" " " response</u>	<u>4</u>
<u>298-21</u>	<u>19-Aug-85</u>	<u>Reg. Status of "Voluntary Delisting"</u>	<u>2 B.1.6</u>
<u>298-22</u>	<u>9-Sep-85</u>	<u>Rock Island Summary</u>	<u>2 D.1.2</u>
<u>298-23</u>	<u>6-March-84</u>	<u>Request for Organic H₂O Delisting</u>	<u>2 B.1.6</u>
<u>298-24</u>	<u>6-Sept-85</u>	<u>Russell to Legue - Inspection LOI</u>	<u>2 C.2</u>

* Folder 1 is arranged by sections.

PART B DOCKET LOG

Please print

Facility Rock Island ReformatoryI.D. # IND 006 417 430

Item No.	Item Date	Description	Item Filed*
298-25	2-Aug-85	Doyle to Ardiente, Correction Action Response	2 D.1.2
298-26	Jan 17 86	Fed. Reg. intent to drug delisting ^{Review is completed}	2 B.1.6
298-27	July 7 86	Report of Conversion Voice Sampling H.R.	3 B.1.6
298-28	July 17 86	F.R. - denial of delisting	2 B.1.6
298-29	Aug 28 86	Letter to R.I. - ^{camp section} inmate ^{inmate} inmate	2 B.1.6
298-30	Sept 26 86	withdrawal of T03 - IDE 14	2
298-31	Dec 19 86	F.R. extension of comment period	2

B.1.2

ROCK ISLAND REFINING CORPORATION

(IND006417430)

PART B APPLICATION

As Filed With The

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

Region V

P. O. Box A3587

Chicago, Illinois 60690-3587

on

February 28, 1985

Prepared By

William E. Laque
Environmental Coordinator
Rock Island Refining Corporation
5000 West 86th Street
Indianapolis, Indiana 46268
(317/872-3200)

and

George W. Pendygraft, Ph.D., J.D.
Baker & Daniels
810 Fletcher Trust Building
Indianapolis, Indiana 46204
(317/264-1784)



ROCK ISLAND REFINING

Corporation

February 28, 1985

RCRA Activities
Part B Permit Application
United States Environmental
Protection Agency
P. O. Box A3587
Chicago, Illinois 60690-3587

Attention: Karl J. Klepitsch, Jr., Chief
Waste Management Branch

Dear Mr. Klepitsch:

Rock Island Refining Corporation (Rock Island),
5000 West 86th Street, Indianapolis, Indiana, hereby submits
its Part B application for those treatment and storage
facilities at its refinery subject to the requirements of
the Resource Conservation and Recovery Act and regulations
promulgated thereunder.

We would be pleased to meet with you or your staff
to discuss any preliminary comments you or staff may have
with regard to this Part B application. Please call if you
have questions or need of additional information.

Very truly yours,

William E. Laque
William E. Laque
Environmental Coordinator

WEL:sy

Enclosure


cc w/o enc.: Mrs. Edith Ardiente
George W. Pendygraft, Ph.D., J.D.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

ROCK ISLAND REFINING CORPORATION

By



William E. Laque
Environmental Coordinator

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SECTION I

ACKNOWLEDGEMENT OF NOTIFICATION OF
HAZARDOUS WASTE ACTIVITY

(8/18/80)

cc - JOC }
- WEL } 11/10/80



ACKNOWLEDGEMENT OF NOTIFICATION
OF HAZARDOUS WASTE ACTIVITY

CCB 11/10/80

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

IND006417430

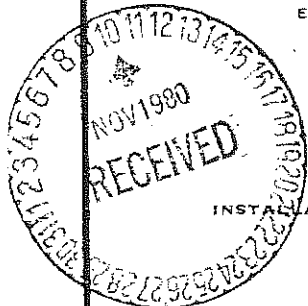
ROCK ISLAND REFINING CORP
PO BOX 68007
INDIANAPOLIS

IN 46268

INSTALLATION ADDRESS

5000 W 86TH ST
INDIANAPOLIS

IN 46268



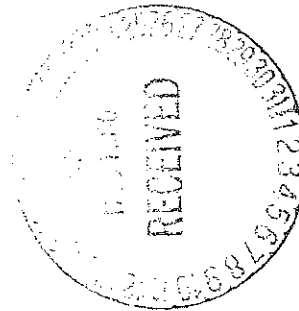
EPA Form 8700-12A (4-80)



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:

Date: November 13, 1980
To: RCRA NOTIFIERS
Subject: EPA IDENTIFICATION NUMBERS



It is my understanding that our Headquarters has not sent you an acknowledgement of the notification which you filed with this Agency. By manual search of our Regional files we have retrieved the identification number for your facility located at the address given on your notification. It is shown on the label below:

You will receive an official acknowledgement from our Headquarters for your operation at this address in the very near future.

Sincerely,

A handwritten signature in cursive script, appearing to read "Karl J. Klepitsch, Jr.".

Karl J. Klepitsch, Jr., Chief
Waste Management Branch

SECTION II

- A. Original Part A Application (11/18/80)
- B. Revised Part A Application (2/27/85)

ORIGINAL PART A APPLICATION

(11/18/80)

GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
I. EPA I.D. NUMBER		IND006417430		FIND006417430	
FACILITY NAME		Rock Island Refining Corporation			
FACILITY MAILING ADDRESS		5000 West 86th Street Indianapolis, Indiana 46268			
FACILITY LOCATION		5000 West 86th Street Indianapolis, Indiana 46268			

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

SPECIFIC QUESTIONS		MARK 'X'		SPECIFIC QUESTIONS		MARK 'X'	
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		N.A.	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

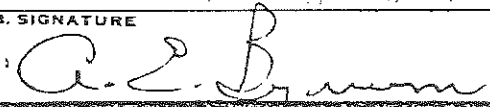
III. NAME OF FACILITY	
1	ROCK ISLAND REFINING CORPORATION

IV. FACILITY CONTACT	
A. NAME & TITLE (last, first, & title)	B. PHONE (area code & no.)
2 LAQUE WILLIAM E. ENVIRON COORD	317 872 3200

V. FACILITY MAILING ADDRESS	
A. STREET OR P.O. BOX	B. CITY OR TOWN
3 5000 WEST 86TH STREET	INDIANAPOLIS
C. STATE	D. ZIP CODE
IN	46268

VI. FACILITY LOCATION	
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER	B. COUNTY NAME
5 5000 WEST 86TH STREET	MARION
C. CITY OR TOWN	D. STATE
INDIANAPOLIS	IN
E. ZIP CODE	F. COUNTY CODE (if known)
46268	NA

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)									
A. FIRST					B. SECOND				
7 2 9 1 1 (specify)					7 (specify)				
INTEGRATED PETROLEUM REFINERY									
C. THIRD					D. FOURTH				
7 (specify)					7 (specify)				
VIII. OPERATOR INFORMATION									
A. NAME									
8 ROCK ISLAND REFINING CORPORATION									
B. Is the name listed in Item VIII-A also the owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO									
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)									
F = FEDERAL M = PUBLIC (other than federal or state) P (specify) S = STATE O = OTHER (specify)									
D. PHONE (area code & no.)									
A 3 1 7 8 7 2 3 2 0 0									
E. STREET OR P.O. BOX									
5 0 0 0 WEST 8 6 TH STREET									
F. CITY OR TOWN									
8 INDIANAPOLIS									
G. STATE									
IN									
H. ZIP CODE									
4 6 2 6 8									
IX. INDIAN LAND									
Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO									
X. EXISTING ENVIRONMENTAL PERMITS									
A. NPDES (Discharges to Surface Water)									
9 IN 0 0 0 2 3 6 4									
D. PSD (Air Emissions from Proposed Sources)									
9 P									
B. UIC (Underground Injection of Fluids)									
9 U									
E. OTHER (specify)									
IN 2 9 1 1 0 1 (specify) Discharge to Indianapolis POTW									
C. RCRA (Hazardous Wastes)									
9									
E. OTHER (specify)									
SEE ATTACH A (specify)									
XI. MAP									
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. SEE ATTACHMENT B									
XII. NATURE OF BUSINESS (provide a brief description)									
Rock Island Refining Corporation owns and operates a refinery that produces gasoline, kerosene (range oil or #1 fuel oil), distillate fuel oils, residual fuel oils, and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.									
XIII. CERTIFICATION (see instructions)									
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.									
A. NAME & OFFICIAL TITLE (type or print)					B. SIGNATURE			C. DATE SIGNED	
E. Bynum, Sr. V.P. Mfg.								11/18/80	
COMMENTS FOR OFFICIAL USE ONLY									

ATTACHMENT A

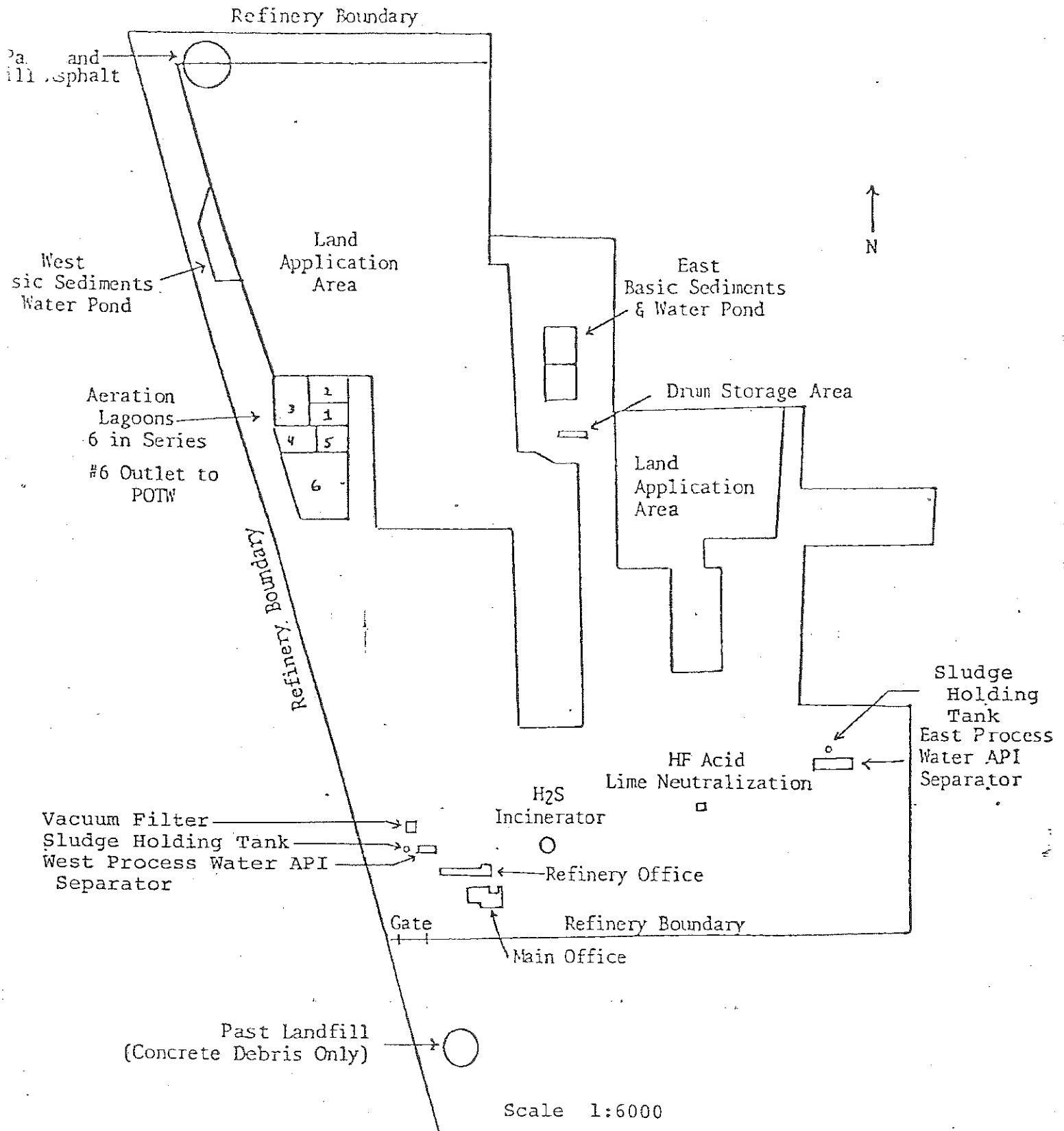
"X. Existing Environmental Permits E. Other (Specify)"

Permit Nos. 06301, 06304, 06305, 06306, 06307, 06308, 06309, 06310, 06311, 06312, 06313, 06314, 06315, 06316, 06317, 06318, 06319, 06320, 06321, 06322, 06323, 06324, 06325, 06326, 06327, 06328, 06329, 06330, 06331, 06332, 06333, 06334, 06335, 06336, 06337, 06338, 06339, 06340, 06341, and 06342 were issued to Rock Island by the Indianapolis Department of Public Works, Air Pollution Control Division ("IAPCD"). In addition, Rock Island has applications for air permits pending before the IAPCD. The Indiana Air Pollution Control Board has issued to Rock Island a PSD Permit No. PC(49) 1277.

ATTACHMENT B

"XI. MAP"

- Figure 1-1. Location Map. This figure presents a topographic map of the area in and around the facility. The legal boundaries of the facility are shown in red on the "Location Map."
- Figure 1-2. Refinery Site Map. This map indicates the location of the NPDES outfalls and the existing discharge structure at the facility.
- Figure 1-3. Facility Map. This map shows all hazardous waste management facilities.
- Figure 1-4. Approximate Water Well Location Map. This shows the drinking water wells located within 1/4 mile of the facility.



Facility Map
Figure 1-3

Ex. 9
Wells

APPROXIMATE WATER WELL
LOCATION MAP

FIGURE 1-4

STATE EXHIBIT 1

FORM 3 RCRA		U.S. ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS WASTE PERMIT APPLICATION <i>Consolidated Permits Program</i> (This information is required under Section 3005 of RCRA.)	I. EPA I.D. NUMBER <table border="1" style="width:100%"><tr><td>S</td><td>F</td><td>I</td><td>N</td><td>D</td><td>0</td><td>0</td><td>6</td><td>4</td><td>1</td><td>7</td><td>4</td><td>3</td><td>0</td><td>T</td><td>A</td><td>C</td></tr><tr><td>11</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr></table>	S	F	I	N	D	0	0	6	4	1	7	4	3	0	T	A	C	11	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
S	F	I	N	D	0	0	6	4	1	7	4	3	0	T	A	C																					
11	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																					

FOR OFFICIAL USE ONLY		COMMENTS							
APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)								
<table border="1" style="width:100%"><tr><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td></tr></table>	23	24	25	26	27	28	29		
23	24	25	26	27	28	29			

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)		<input type="checkbox"/> 2. NEW FACILITY (Complete item below.)									
<input checked="" type="checkbox"/> 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)											
<table border="1" style="width:100%"><tr><td>YR.</td><td>MO.</td><td>DAY</td></tr><tr><td>8</td><td>4</td><td>10</td></tr><tr><td>73</td><td>74</td><td>75</td></tr></table>	YR.	MO.	DAY	8	4	10	73	74	75	FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left) See Attachment A	
YR.	MO.	DAY									
8	4	10									
73	74	75									

B. REVISED APPLICATION (place an "X" below and complete Item I above)	
<input type="checkbox"/> 1. FACILITY HAS INTERIM STATUS	<input type="checkbox"/> 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. **AMOUNT** - Enter the amount.

2. **UNIT OF MEASURE** - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:			Treatment:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	S02	GALLONS OR LITERS		T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	SURFACE IMPOUNDMENT		TONS PER HOUR OR METRIC TONS PER HOUR
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	INCINERATOR	T03	GALLONS PER HOUR OR LITERS PER HOUR
Disposal:					
SECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY
LAND APPLICATION	D81	ACRES OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS			
UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE
GALLONS.....	G	LITERS PER DAY.....	ACRE-FEET.....	A	
LITERS.....	L	TONS PER HOUR.....	HECTARE-METER.....	F	
CUBIC YARDS.....	Y	METRIC TONS PER HOUR.....	ACRES.....	B	
CUBIC METERS.....	C	GALLONS PER HOUR.....	HECTARES.....	Q	
GALLONS PER DAY.....	U	LITERS PER HOUR.....			

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

DUP																																																																																			
<table border="1" style="width:100%"><tr><th rowspan="2">LINE NUMBER</th><th rowspan="2">A. PRO-CESS CODE (from list above)</th><th colspan="2">B. PROCESS DESIGN CAPACITY</th><th rowspan="2">FOR OFFICIAL USE ONLY</th><th rowspan="2">LINE NUMBER</th><th rowspan="2">A. PRO-CESS CODE (from list above)</th><th colspan="2">B. PROCESS DESIGN CAPACITY</th><th rowspan="2">FOR OFFICIAL USE ONLY</th></tr><tr><th>1. AMOUNT (specify)</th><th>2. UNIT OF MEASURE (enter code)</th><th>1. AMOUNT</th><th>2. UNIT OF MEASURE (enter code)</th></tr><tr><td>X-1</td><td>S 0 2</td><td>600</td><td>G</td><td></td><td>5</td><td>T 0 3</td><td>0.02</td><td>D</td><td></td></tr><tr><td>X-2</td><td>T 0 3</td><td>20</td><td>E</td><td></td><td>6</td><td>T 0 1</td><td>1640</td><td>U</td><td></td></tr><tr><td>1</td><td>T 0 1</td><td>3,456,000</td><td>U</td><td></td><td>7</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>0 2</td><td>6,000</td><td>G</td><td></td><td>8</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>T 0 4</td><td>23,040</td><td>U</td><td></td><td>9</td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>D 8 1</td><td>40</td><td>B</td><td></td><td>10</td><td></td><td></td><td></td><td></td></tr></table>										LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)	1. AMOUNT	2. UNIT OF MEASURE (enter code)	X-1	S 0 2	600	G		5	T 0 3	0.02	D		X-2	T 0 3	20	E		6	T 0 1	1640	U		1	T 0 1	3,456,000	U		7						0 2	6,000	G		8					3	T 0 4	23,040	U		9					4	D 8 1	40	B		10				
LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY																																																																										
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)																																																																											
X-1	S 0 2	600	G		5	T 0 3	0.02	D																																																																											
X-2	T 0 3	20	E		6	T 0 1	1640	U																																																																											
1	T 0 1	3,456,000	U		7																																																																														
	0 2	6,000	G		8																																																																														
3	T 0 4	23,040	U		9																																																																														
4	D 8 1	40	B		10																																																																														

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Line No. 6. T04. The vacuum filter process is used to reduce the water content of materials.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS.....	P	KILOGRAMS.....	K
TONS.....	T	METRIC TONS.....	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X	0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY													
W I N D 0 0 6 4 1 7 4 3 0 T/A C 1													W DUP T/A C 2 DUP													
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)																										
NO.	A. EPA HAZARD. WASTE NO. (enter code)					B. ESTIMATED ANNUAL QUANTITY OF WASTE					C. UNIT OF MEASURE (enter code)	D. PROCESSES														
												1. PROCESS CODES (enter)										2. PROCESS DESCRIPTION (if a code is not entered in D(1))				
1	K	O	4	9	312					T	T O 1															
2	K	O	5	1	312					T	S O 2 T O 4 D 8 1															
3	U	1	3	4	See Attachment B (52)					T	T O 1															
4	U	1	3	5	See Attachment B (175)					T	T O 3															
5	K	O	5	0	See Attachment B (o.33)					T	T O 1															
6	K	O	5	2	See Attachment B																					
7	-	-	-	-	See Attachment B (7,750)					T	D 8 1															
8																										
9																										
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IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)													
F	I	N	D	0	0	6	4	1	7	4	3	0	6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail). See Attach. D

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)												LONGITUDE (degrees, minutes, & seconds)											
3	9	5	4	4	0	8	6	1	5	1	0												

VIII. FACILITY OWNER

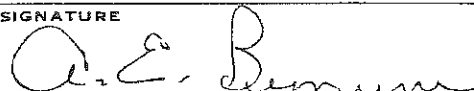
- ☒ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER												2. PHONE NO. (area code & no.)											
N.A.																							
3. STREET OR P.O. BOX												4. CITY OR TOWN											
5. ST.												6. ZIP CODE											

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
A.E. Bynum, Sr. V.P. Mfg.		11/18/80

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)	B. SIGNATURE	C. DATE SIGNED
N.A.		

V. FACILITY DRAWING (see page 4)

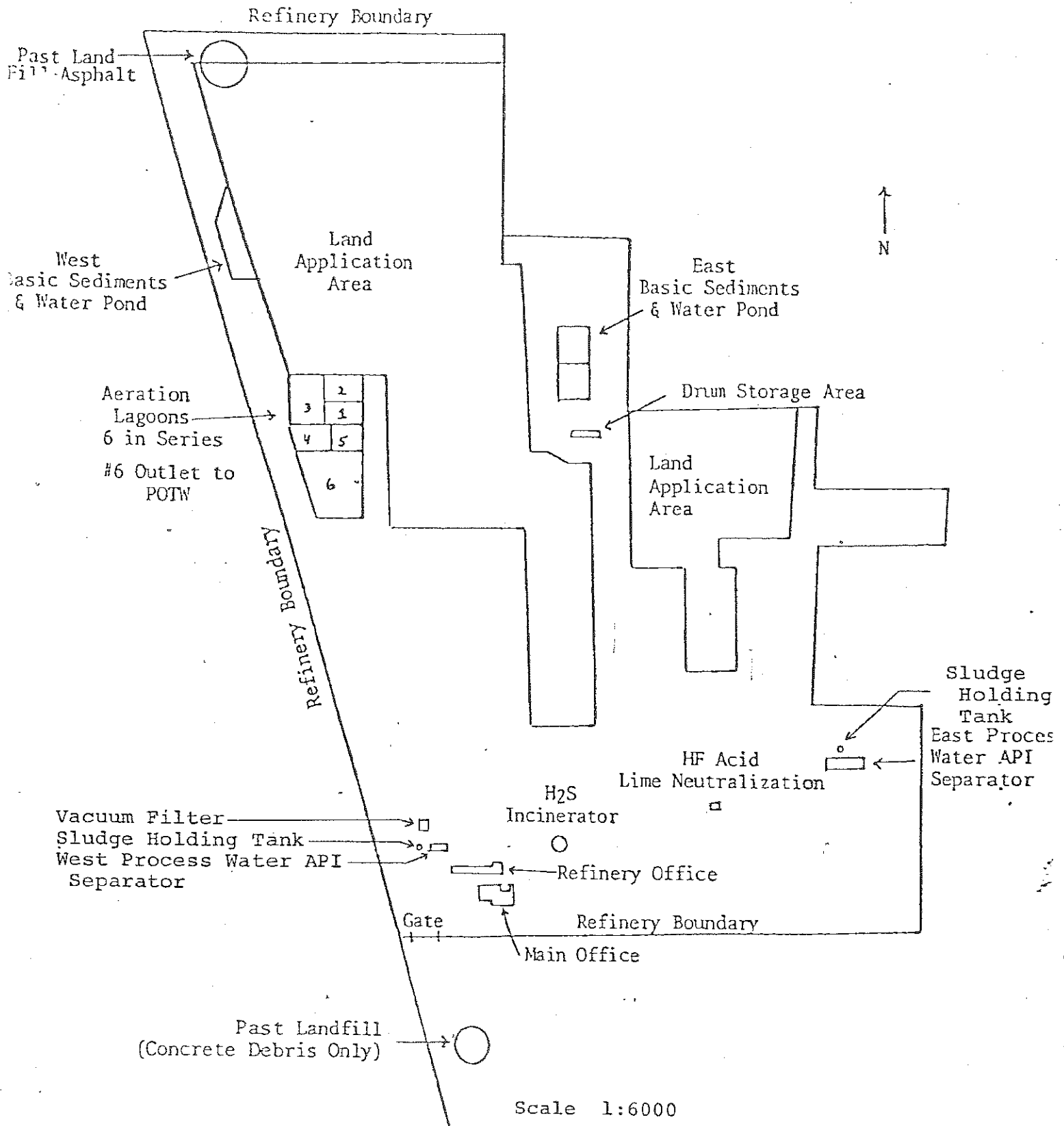


Figure 3-1 (See Attachment C)

ATTACHMENT A

II. First or Revised Application (continued)

A. First Application

The date operation began or construction commenced is set out below for each of the hazardous waste facilities:

<u>Facility</u>	<u>Year</u>	<u>Month</u>	<u>Day</u>
API Separator (West)	1941	October	10
API Separator (East)	1959	August	12
Sludge Holding Tanks	1980	August	1
Alkylation Unit, HF-lime neutralization (<u>see</u> Attachment B)	1966	November	8
Sulfur Recovery Unit, H ₂ S Incinerator (<u>see</u> Attachment B)	1978	May	5
Vacuum filter	1950	August	28
Land application	1980	November	19

ATTACHMENT B

Form 3 RCRA

"IV. DESCRIPTION OF HAZARDOUS WASTES" (continued)

Line No.

- 3 and 4 U134 and U135. Hydrofluoric (HF) acid is neutralized at the facility by the use of lime (see Attachment A). Hydrogen sulfide (H₂S) is incinerated at the facility (see Attachment A). Rock Island Refining Corporation ("Rock Island") does not discard or intend to discard these materials (HF and H₂S) and takes the position that they are not hazardous wastes. See 40 C.F.R. § 261.33, 45 Fed. Reg. 33084, 33124 (May 19, 1980). Pending a concurring determination by EPA, however, Rock Island has provided the information required for interim status.
- 5 and 6 KO50 and KO52. Rock Island understands that heat exchanger bundle cleaning sludge is exempt from regulation until it is removed from the unit in which it is generated. 40 C.F.R. § 261.4(c), 45 Fed. Reg. 72024, 72028 (Oct. 30, 1980). Pursuant to the same section of the regulations, Rock Island assumes that the materials (tank bottoms or KO52) settled in its large storage tanks are also exempt until they exit the storage tanks.
- 7 Rock Island has two ponds previously used to store basic sediments and water (BS&W) at the facility. See Figure 3-1. These BS&W ponds contain an estimated 250,000 ft³ of materials (or 7,750 tons at an assumed density of 62 lbs/ft³), which wastes were likely derived, in part, from one or more of the specific sources designated as KO49, KO50, KO51 and KO52. These ponds are now (November 19, 1980) "inactive" and are not subject to the interim status standards. Based on studies and the available information as to the specific

ATTACHMENT B (Continued)

materials in its BS&W ponds ("BS&W materials"), Rock Island has determined that these BS&W materials are not ignitable, corrosive, or reactive and do not exhibit the characteristic of EP toxicity as defined by EPA's regulations. 40 C.F.R. § 261.21, 261.22, 261.23 and 261.24. As this mixture of BS&W materials, including materials from one or more of the specific sources, K049, K050, K051 and K052 (40 C.F.R. § 261.32), occurred prior to November 19, 1980, Rock Island understands that the materials are not hazardous wastes, per se. Moreover, because these BS&W materials do not exhibit any of the Subpart C characteristics of hazardous wastes, Rock Island concludes that they are not hazardous wastes for purposes of Subtitle C of the Resource Conservation and Recovery Act. Pending a concurring determination by EPA, however, Rock Island has provided the required information.

ATTACHMENT C

"V. Facility Drawing" (continued)

Figure 3-1. See page 5, supra; see also Figure 1-3
(the same map).

Figure 3-2. Refinery Site Map. See Figure 1-2
(the same map). This map provides the
approximate dimensions of the property
boundaries and all storage, treatment
and disposal areas.

ATTACHMENT D

"VI. Photographs"

REVISED PART A APPLICATION

(2/27/85)

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER																																																							
<div style="display: flex; flex-direction: column; align-items: flex-start;"><div style="margin-bottom: 10px;">I. EPA I.D. NUMBER</div><div style="margin-bottom: 10px;">II. FACILITY NAME</div><div style="margin-bottom: 10px;">III. FACILITY MAILING ADDRESS</div><div>VI. FACILITY LOCATION</div></div>		IND006417430 Rock Island Refining Corporation 5000 West 86th Street Indianapolis, Indiana 46268 5000 West 86th Street Indianapolis, Indiana 46268		IND 0 0 6 4 2 7 4 3 0																																																							
GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.																																																											
II. POLLUTANT CHARACTERISTICS INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column. If the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.																																																											
<table border="1" style="width:100%; border-collapse: collapse;"><thead><tr><th rowspan="2">SPECIFIC QUESTIONS</th><th colspan="3">MARK 'X'</th><th rowspan="2">SPECIFIC QUESTIONS</th><th colspan="3">MARK 'X'</th></tr><tr><th>YES</th><th>NO</th><th>FORM ATTACHED</th><th>YES</th><th>NO</th><th>FORM ATTACHED</th></tr></thead><tbody><tr><td>A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)</td><td></td><td>X</td><td></td><td>B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)</td><td></td><td>X</td><td></td></tr><tr><td>C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)</td><td>X</td><td></td><td>N.A.</td><td>D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)</td><td></td><td>X</td><td></td></tr><tr><td>E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)</td><td>X</td><td></td><td>X</td><td>F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)</td><td></td><td>X</td><td></td></tr><tr><td>G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)</td><td></td><td>X</td><td></td><td>H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)</td><td></td><td>X</td><td></td></tr><tr><td>I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)</td><td></td><td>X</td><td></td><td>J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)</td><td></td><td>X</td><td></td></tr></tbody></table>						SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'			YES	NO	FORM ATTACHED	YES	NO	FORM ATTACHED	A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X		C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X		N.A.	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X		E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X		G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X		I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'																																																						
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED																																																				
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III. NAME OF FACILITY 1 SKIP Rock Island Refining Corporation																																																											
IV. FACILITY CONTACT A. NAME & TITLE (last, first, & title) B. PHONE (area code & no.) 2 Laque William E Environ Coord 317 872 3200																																																											
V. FACILITY MAILING ADDRESS A. STREET OR P.O. BOX B. CITY OR TOWN C. STATE D. ZIP CODE 3 5000 West 86th Street IN 46268																																																											
VI. FACILITY LOCATION A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER B. COUNTY NAME C. CITY OR TOWN D. STATE E. ZIP CODE F. COUNTY CODE (if known) 5 5000 West 86th Street Marion IN 46268 NA																																																											

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
7 2 9 1 1 (specify)										7 (specify)									
INTEGRATED PETROLEUM REFINERY																			
C. THIRD										D. FOURTH									
(specify)										(specify)									

VIII. OPERATOR INFORMATION

A. NAME																									B. Is the name listed in Item VIII-A also the owner?				
Rock Island Refining Corporation																									<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)																									D. PHONE (area code & No.)				
F = FEDERAL S = STATE P = PRIVATE										M = PUBLIC (other than federal or state) O = OTHER (specify)										P (specify)					A 3 1 7 8 7 2 3 2 0 0				
E. STREET OR P.O. BOX																													
5 0 0 0 West 8 6 t h Street																													
F. CITY OR TOWN															G. STATE					H. ZIP CODE					IX. INDIAN LAND				
B Indianapolis															IN					4 6 2 6 8					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)															D. PSD (Air Emissions from Proposed Sources)														
9 N IN 0 0 0 2 3 6 4															9 P														
B. UIC (Underground Injection of Fluids)															E. OTHER (specify)														
9 U															9 IN 2 9 1 1 0 1 (specify) Discharge to Indianapolis POTW														
C. RCRA (Hazardous Wastes)															E. OTHER (specify)														
9															9 See attach A (specify)														

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. See attachment B

XII. NATURE OF BUSINESS (provide a brief description)

Rock Island Refining Corporation owns and operates a refinery that produces gasoline, kerosene (rang oil or #1 fuel oil), distillate fuel oils, residual fuel oils, and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.		
A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
J. P. HOFER VICE PRESIDENT FINANCE	<i>J. P. Hofer</i>	2-28-85

COMMENTS FOR OFFICIAL USE ONLY

C	
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ATTACHMENT A

"X Existing Environmental Permits E. Other (Specify)"

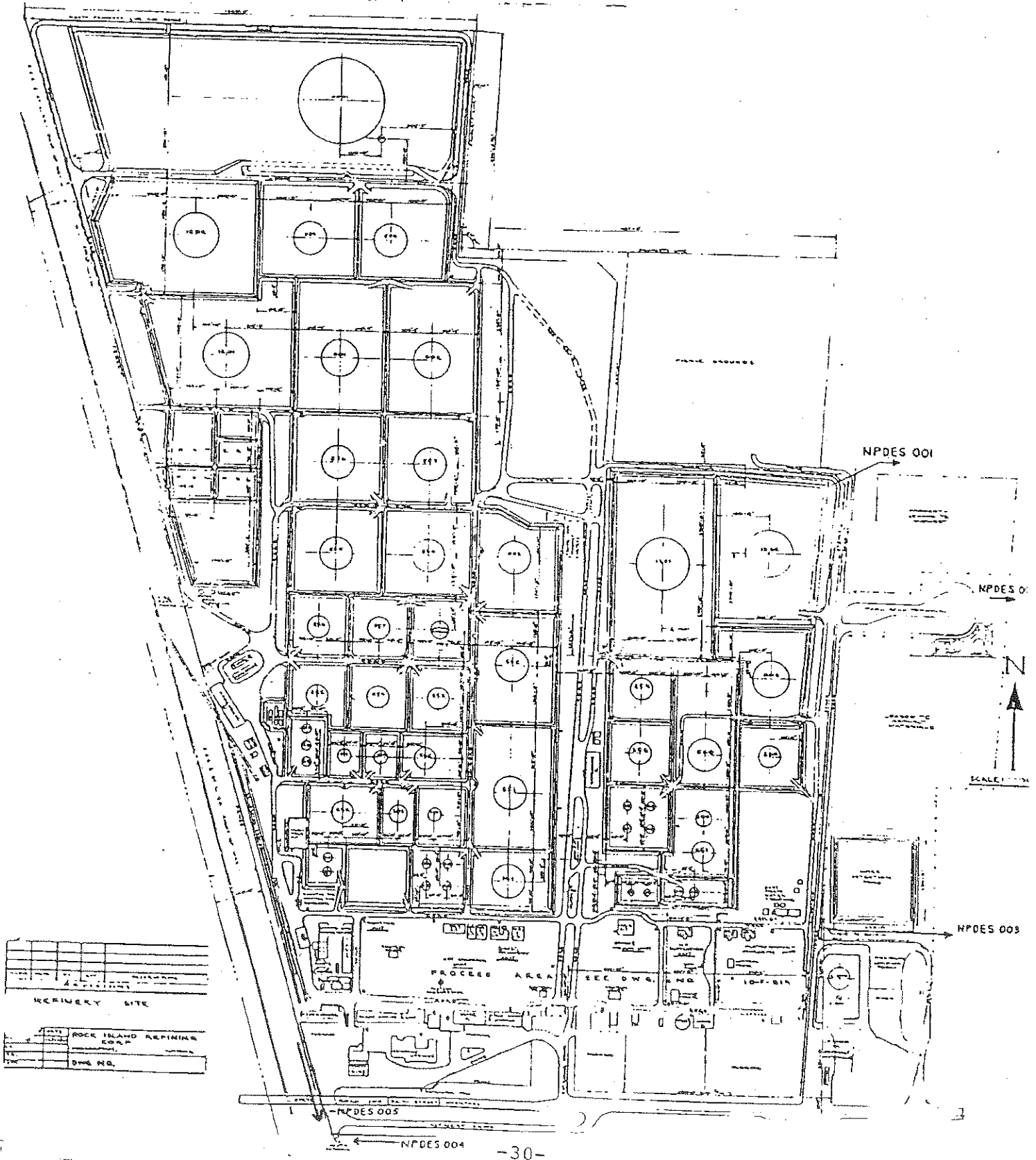
Permit Nos. 07509, 07510, 07511, 07512, 07513, 07514, 07515, 07516, 07517,
07518, 07519, 07520, 07521, 07522, 07523, 07524, 07525, 07526,
07527, 07528, 07529, 07530, 07869, 07870, 07871, 07872, 07873,
07874, 07875, 07876, 07877, 07878, 07879, 07880, 07881, 07882,
07883, 07884, 07885. Note that permit numbers have been changed
due to expiration and reissuance of specified permits.

ATTACHMENT B

"XI. MAP"

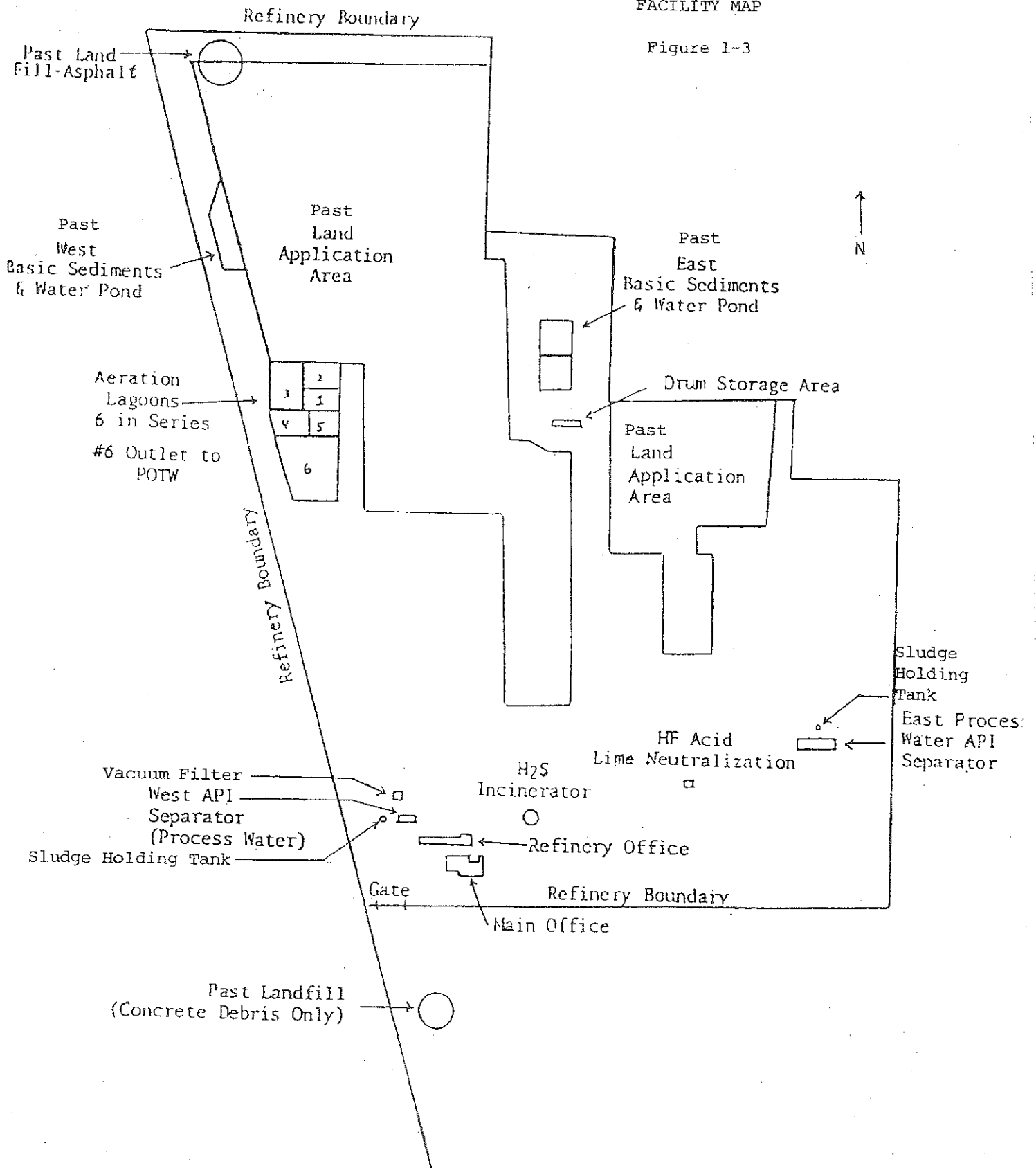
- Figure 1-1. Location Map. This figure presents a topographic map of the area in and around the facility. The legal boundaries of the facility are shown in red on the "Location Map."
- Figure 1-2. Refinery Site Map. This map indicates the location of the NPDES outfalls and the existing discharge structure at the facility.
- Figure 1-3. Facility Map. This map shows all hazardous waste management facilities.
- Figure 1-4. Approximate Water Well Location Map. This shows the drinking water wells located within 1/4 mile of the facility.

Fig. 1 - 2
Refinery Map



FACILITY MAP

Figure 1-3



Ex. 9
Wells

APPROXIMATE WATER WELL
LOCATION MAP

FIGURE 1-4

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Form Approved OMB No. 15B-S80004

FOR OFFICIAL USE ONLY

II. FIRST OR REVISED APPLICATION

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

B. REVISED APPLICATION (place an "X" below and complete item I above)

III. PROCESSES - CODES AND DESIGN CAPACITIES

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

- | PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY | PROCESS | PROCESS CODE | APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY |
|--------------------------------|--------------|--|--|-------------------------|--|
| Storage: | | | Treatment: | | |
| CONTAINER (barrel, drum, etc.) | S01 | GALLONS OR LITERS | TANK | T01 | GALLONS PER DAY OR LITERS PER DAY |
| TANK | S02 | GALLONS OR LITERS | SURFACE IMPOUNDMENT | T02 | GALLONS PER DAY OR LITERS PER DAY |
| WASTE PILE | S03 | CUBIC YARDS OR CUBIC METERS | | T03 | TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR |
| SURFACE IMPOUNDMENT | S04 | GALLONS OR LITERS | INCINERATOR | | |
| Disposal: | | | OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.) | | |
| INJECTION WELL | D79 | GALLONS OR LITERS | | T04 | GALLONS PER DAY OR LITERS PER DAY |
| LANDFILL | D80 | ACRE-Feet (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER | | | |
| LAND APPLICATION | D81 | ACRES OR HECTARES | | | |
| OCEAN DISPOSAL | D82 | GALLONS PER DAY OR LITERS PER DAY | | | |
| SURFACE IMPOUNDMENT | D83 | GALLONS OR LITERS | | | |
| UNIT OF MEASURE CODE | | | UNIT OF MEASURE CODE | | |
| UNIT OF MEASURE | | UNIT OF MEASURE | | UNIT OF MEASURE | |
| GALLONS | G | LITERS PER DAY | V | ACRE-Feet | A |
| LITERS | L | TONS PER HOUR | D | HECTARE-METER | F |
| CUBIC YARDS | Y | METRIC TONS PER HOUR | W | ACRES | B |
| CUBIC METERS | C | GALLONS PER HOUR | E | HECTARES | Q |
| GALLONS PER DAY | U | LITERS PER HOUR | H | | |

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

EPA Form 3510-3 (6-80)

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Line No. 3. T01 The vacuum filter is used to reduce the water content of materials.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS.....	P	KILOGRAMS.....	K
TONS.....	T	METRIC TONS.....	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES**1. PROCESS CODES:**

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY																					
8													T/A	C	8													T/A	C					
W	I	N	D	O	O	6	4	1	7	4	3	0																						
1	2											13	14	15	1	E											13	14	15	16	17	18	19	20

[illegible]

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)

F I N D O O 6 4 1 7 4 3 0 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

3 9 5 4 4 0

LONGITUDE (degrees, minutes, & seconds)

8 6 1 5 1 0

VIII. FACILITY OWNER

☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

N.A.

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

J.P. HOFER, VICE PRESIDENT -
FINANCE

B. SIGNATURE

J.P. Hofer

C. DATE SIGNED

2-28-85

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

J.P. HOFER, VICE PRESIDENT -
FINANCE

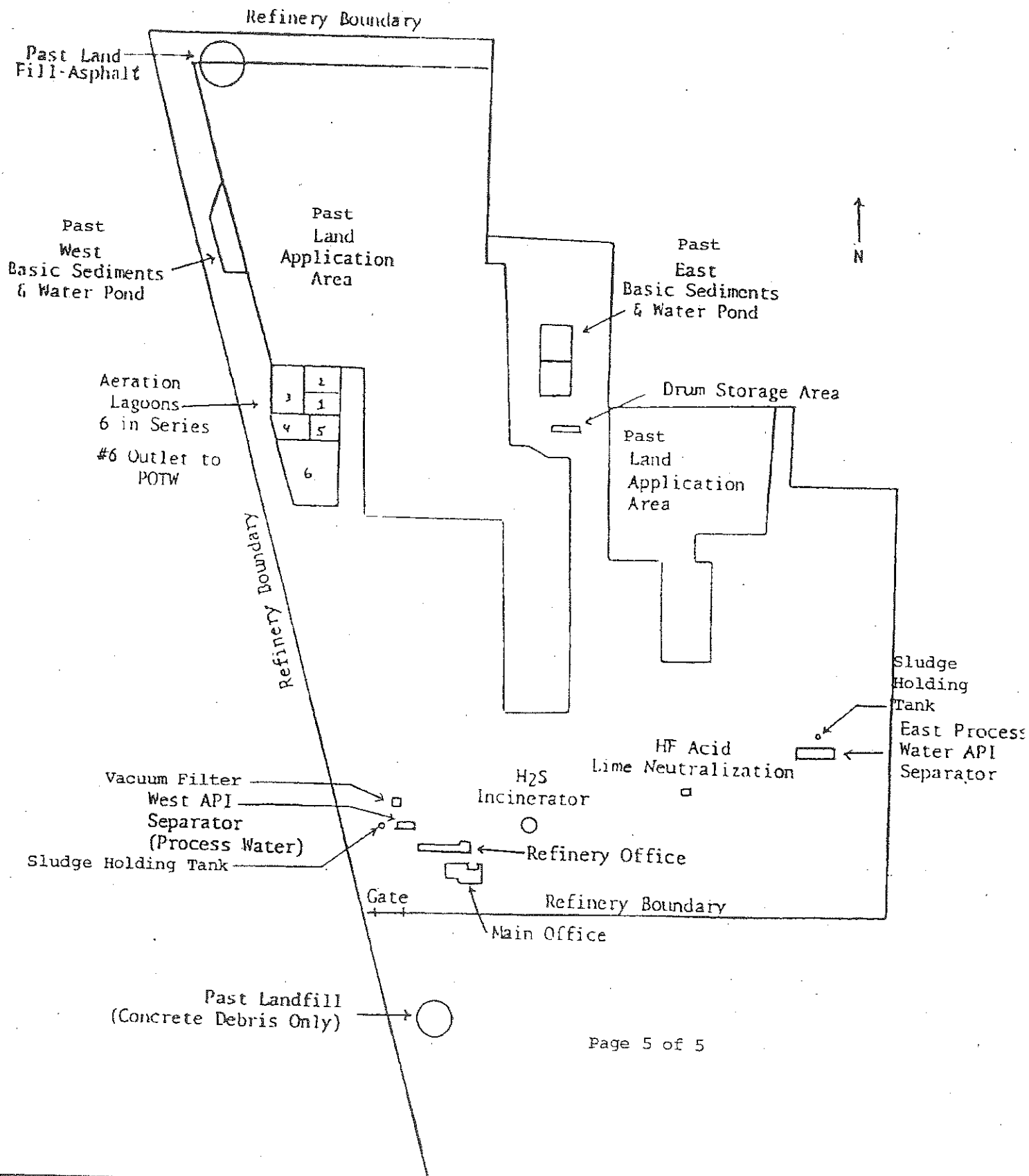
B. SIGNATURE

J.P. Hofer

C. DATE SIGNED

2-28-85

V. FACILITY DRAWING (see page 4)



Page 5 of 5

SECTION III

GENERAL INFORMATION REQUIREMENTS

- A. General Description
- B. Chemical and Physical Analyses
- C. Waste Analysis Plan

A. General Description.

Rock Island Refining Corporation owns and operates a petroleum refinery at 5000 West 86th Street, Indianapolis, Indiana. This refinery produces gasoline, kerosene (range oil or #1 fuel oil), distillate fuel oils, residual fuel oils and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes.

The refinery's wastes are first collected and treated in either the East API oil-water separator facility or the West API oil-water separator facility. The recovered oil is returned to the plant for processing. The settled material from the API separators is temporarily stored either in tanks or suction pits and then conveyed to a vacuum filter for dewatering. The cake from the vacuum filter (the filter cake) is transported and disposed offsite at a landfill in compliance with federal and state requirements.

B. Chemical and Physical Analyses.

A compilation of the chemical and physical analyses for solid and hazardous wastes generated, stored or treated at the refinery are presented in Appendix A.

C. Waste Analysis Plan

Hazardous wastes stored or treated at the refinery are listed in the revised Part A application (Section II, Paragraph B). Chemical and physical analyses that enable treatment and storage of these wastes in accordance with the requirements of 40 C.F.R., Part 264, are presented in Section III, Paragraph B.

Analyses are repeated as necessary to ensure accurate and up-to-date information and, at a minimum, are repeated when there is reason to believe that the process or operation generating the hazardous waste has changed.

The parameters to be tested are those listed in 40 C.F.R., Part 261, Appendix VII, which caused the wastes to be listed as hazardous, e.g.,

K049 for hexavalent chromium and lead;

K050 for hexavalent chromium; and

K051 for hexavalent chromium and lead.

All samples will be taken in accordance with the representative sampling methods of 40 C.F.R., Part 261,

Appendix I, and analyses will be conducted in accordance with the procedures of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," 2nd Ed. (1982).

SECTION IV

SECURITY PROCEDURES AND EQUIPMENT

Measures have been instituted to prevent unknowing entry and to minimize the possibility for the unauthorized entry of persons or livestock onto the active portions of the refinery's treatment and storage facilities.

A 24-hour, 365-day-per-year surveillance is maintained at the refinery by supervisory personnel.

The entire refinery site is enclosed by a 6-foot chain-linked fence topped with three strands of barbed wire. Other artificial and natural barriers (e.g., dikes and berms) surround the active portions of the refinery.

All entrances and exits are locked, except for the clockhouse gate which is monitored 24 hours a day.

Signs with legends indicating that only authorized personnel are allowed to enter are posted conspicuously at the refinery.

SECTION V

GENERAL INSPECTION SCHEDULE

This inspection schedule allows for the detection of malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to release of hazardous waste constituents to the environment or threat to human health. Inspections are conducted frequently enough to identify problems in time to correct them before they harm human health or the environment.

The written schedule described below was developed and is maintained at the refinery for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment.

<u>Facility Equipment</u>	<u>Problem Check</u>	<u>Inspection Frequency</u>
<u>West API</u>	Level	1/wk
Lift Pumps	Inoperative/ deterioration	1/wk
Ford Pump	Inoperative/ deterioration	1/wk
Ford Pump Fuel Tk and Crank Case Oil	Level	1/wk

<u>Facility Equipment</u>	<u>Problem Check</u>	<u>Inspection Frequency</u>
35 Sump	Level	1/wk
Oliver Filter	Inoperative/ deterioration	1/wk
Slop oil pit	Level	1/wk
Slop oil Tks	Level/leaking valves/ T°/Inoperative/ Deterioration	1/wk
<u>East API</u>	Level	1/wk
Lift Pumps	Inoperative/ Deterioration	1/wk
Ford Pump	Inoperative/ Deterioration	1/wk
Ford Pump Fuel Tk and Crank Case Oil	Level	1/wk
Sump for P-8 Bldg.	Level	1/wk
Run Off Water Valves	Open/closed/ Deterioration	1/wk
Slop Oil Pit	Level	1/wk
Slop oil Tanks	Level/leaking valves/ T°/Inoperative/ Deterioration	1/wk

Any deterioration or malfunction of equipment or structures which the inspection reveals will be remedied on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Remedial action will be taken immediately where a hazard is imminent or has already occurred.

A record of the inspection for each facility or piece of equipment is entered on an inspection log, which records are maintained for at least 3 years from the date of inspection. These records include (1) the date and time of the inspection, (2) the name of the inspector, (3) a notation of the observations made, and (4) the date and nature of any repairs or other remedial actions.

SECTION VI

PREPAREDNESS AND PREVENTION PLAN

- A. Design and Operation of Facility.
- B. Required Equipment.
- C. Testing and Maintenance of Equipment.
- D. Access to Communications or Alarm System.
- E. Required Aisle Space.
- F. Arrangements with Local Authorities.

A. Design and Operation of Facility

Storage and treatment facilities at the refinery are designed, constructed, maintained and operated to minimize the possibility of fire, explosion or any unplanned sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment. See Appendix B.

B. Required Equipment

A two-way radio communication system provides a means of immediate emergency instruction to refinery personnel.

Telephones, coupled with two-way radios, provide a means by which local police and fire departments and emergency response teams may be summoned to the refinery if emergency assistance is required. See Contingency Plan, Section VII, of this Part B application.

Portable fire extinguishers, foam, inert gas, dry chemicals, spill control equipment and decontamination equipment (e.g., showers, eye washes, etc.) are maintained at the refinery. See Contingency Plan, Section VII, of this Part B application.

Water at adequate volumes (e.g., fire water pond) and pressure to supply water hose streams and other fire equipment (e.g., fire truck) are maintained at the refinery. See Contingency Plan, Section VII, of this Part B application.

C. Testing and Maintenance of Equipment

All refinery communications and alarm systems, fire protection equipment, spill control equipment and decontamination equipment are tested and maintained to assure proper operation in time of emergency.

D. Access to Communications or Alarm System

Whenever hazardous waste is poured, mixed or otherwise handled at the refinery, all personnel involved in the operation have immediate access to emergency communication devices (telephones and/or two-way radios) with other refinery employees. More than one employee is always at the refinery when hazardous wastes are being handled.

E. Required Aisle Space

Aisle space is maintained at the refinery to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the refinery in an emergency.

F. Arrangements with Local Authorities

See Contingency Plan, Section VII, of this Part B application.

SECTION VII

CONTINGENCY PLAN

June 11, 1984

EMERGENCY PROCEDURE
EMRG

CONTINGENCY PLAN

This Contingency Plan is for the Rock Island Refining Corporation plant located at 5000 West 86th Street, Indianapolis, Indiana ("the Refinery").

The Plan is designed to minimize the possibility of hazards to human health or the environment from fires, explosions, or any unplanned sudden or nonsudden release. The provisions of this Plan will be carried out whenever there is a fire, explosion or release of hazardous waste that could threaten human health or the environment. The Refinery's Spill Prevention Control and Countermeasures ("SPCC") Plan, is incorporated as part of this Contingency Plan. Other materials that are part of this Plan are attached.

Arrangements have been made to familiarize police, fire departments, and emergency response teams with the layout of the Refinery, places where affected Refinery personnel would normally be working and entrances to roads inside the Refinery, associated hazards and possible evacuation routes. (The emergency response to fires is listed in separate section.) These arrangements are summarized below:

Ambulance

- | | |
|-------------------------|----------|
| A. Pike Township EMT | 356-6366 |
| B. Zionsville Volunteer | 873-3363 |

A written agreement exists with Pike Township Fire Department regarding Emergency Medical Technician (EMT) service. A verbal arrangement has also been made with the Zionsville Emergency Ambulance. Written protocol among fire departments automatically dispatches paramedics for specific medical emergencies.

Fire Departments

- | | |
|--------------------|----------|
| A. Pike Township - | 356-6366 |
| B. Zionsville | 873-3344 |

Verbal and/or written arrangements have been made with Pike Township and Zionsville Fire Departments. When called, the first unit in and Command Staff respond to the Clockhouse gate. The men and equipment are then staged, ready to be used under the direction of the Refinery's designated Emergency Coordinator.

Hospitals

- A. St. Vincent Hospital (EMERGENCY HEALTH CARE)
2001 W. 86th St. 871-2121
(2 1/2 miles E. of Refinery)

A verbal arrangement exists with the hospital. The nature of any emergency is phoned to the emergency room while the patient is in transit.

Industrial Health Clinics (NON-EMERGENCY HEALTH CARE)

- A. Methodist Health Care Centers
1950 W. 86th St. 872-4775
(2 miles E. of Refinery)

A formal contract regarding non-emergency health care has been made with Methodist Health Care Centers.

- B. Indianapolis Industrial Clinic
320 N. Meridian St. 635-4415

Police

- A. Marion County Sheriff 633-5151

Verbal and written agreements exist with the Marion County Sheriff Department. Calls are handled on a case-by-case basis.

- B. Indiana State Police 899-8577
897-6220

- C. Nora Security 259-1166

A formal contract with Nora Security provides additional traffic control, plant security and scene control during a contingency.

State Response

Indiana Stream Pollution Control
Board (ISPCB) 24 Hr. Phone Number
Mr. Phillip Powers

633-0144

In the event of an oil and/or hazardous material spill, Refinery personnel will immediately notify the appropriate state authorities.

Local Response

- A. Marion County Health & Hospital Corporation
Telephone number (during normal working hours) 633-3691
Telephone number (during off hours contact Mr. Bob Morse) 356-6648
- B. Other number 253-9624

An understanding exists that Marion County Health and Hospital personnel will be notified of any emergency relating to nearby streams. While no night number is available, the home numbers of personnel are on record.

Contractor

A verbal agreement exists such that the spill control contractors are on call as part of a pollution control network. (Refer to SPCC Plan)

Sanitary Sewer

Indianapolis Department of Public Works

8-5 week days 633-5475
off hours 353-2111

The Refinery's permit from the Department of Public Works establishes the appropriate actions to be taken if an emergency arises from a discharge to the Indianapolis POTW.

Air Pollution

24 hr. -- during week

633-5565

A written agreement with the Indianapolis Air Pollution Control Board is on file concerning an emergency response involving any air pollution discharge.

The following persons (in the order in which they will assume responsibility as alternates) are qualified to act as Emergency Coordinator in the case of any unplanned sudden or nonsudden release of hazardous waste, or oil spill.

<u>Name</u>	<u>Address</u>	<u>Phone</u>
1. Bill Laque (Primary Emergency Coordinator)	Ex. 6 22 lines redacted	Ex. 6 11 lines redacted
2. Walt Palmer		
3. Jim Crisler		
4. Bernard Smith		
5. Ron Peters		
6. Russ Bunton (Pump Hs, Ldg Rk, Lab)		
7. Bennie Tyler (Area 1)		
8. Duke Jamison (Area 2)		
9. Curt Sebastian (Area 3)		
10. Nate McDonald (Area 4)		
11. Bud Phillips		

The emergency numbers for the local police authorities, fire authorities, hospitals and state and local response teams are set forth in pages 2-4 of this Plan.

Portable fire extinguishers, pumps, respirators and other emergency equipment are maintained at the Refinery. (The Refinery follows the recommendations of its insuring companies who regularly inspect the Refinery.) A list of the available emergency equipment/materials is presented in the SPOC Plan. Water is available at adequate volumes to supply water hose streams and/or foam producing equipment, if required.

Additional decontamination facilities, including showers, are found in the first aid room and the Refinery's office basement. The supervisors

at the Refinery are equipped with portable two-way radios and can give prompt notice of an emergency situation as well as receiving immediate emergency instructions. Telephones (operable during power outage) are also available for summoning emergency assistance should such a need arise. There is unobstructed access to allow the movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the Refinery in an emergency. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, is tested and maintained routinely to assure its proper operation in time of emergency.

The procedures to be followed during a fire or release of hazardous material, including evacuation, where necessary, are set forth in the separate section. This evacuation plan describes the signals to be used to begin the evacuation as well as the evacuation routes. The designated Emergency Coordinator, in conjunction with the Safety Director, will specify an alternate route where the primary route might be blocked by the release of hazardous wastes or fires.

The designated Emergency Coordinator, pursuant to 40 C.F.R. Sec. 265.56, should immediately take the following action where there is an imminent or actual emergency situation:

1. Notify facility personnel of the emergency situation by activating alarms and/or using available communication systems.
2. Notify appropriate State or local authorities if help is needed.

Whenever there is a release, fire, or explosion, the Emergency Coordinator should immediately:

1. Identify the character, exact source, amount, and the extent of any released materials. (This may be done by observation or review of Refinery records or manifests and, if necessary, by chemical analysis.)
2. Assess possible hazards to human health or the environment.

If the Emergency Coordinator determines that a release, fire, or explosion could threaten human health, or the environment, outside the facility, the following procedures should be immediately implemented:

1. Notify appropriate local authorities if an assessment indicates that evacuation may be advisable.
2. Notify the National Response Center (using their 24-hour toll free number, 800/424-8802). Any such notification should report the following:

- (1) Name and telephone number of reporter;
- (2) Name and address of the Refinery;

- (3) Time and type of incident (e.g., release, fire);
- (4) Name and quantity of material involved (to the extent known);
- (5) The extent of injuries, if any; and
- (6) The possible hazards to human health, or the environment, outside the facility.

During an emergency, all reasonable measures necessary should be taken to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the facility.

If the facility stops operations in response to a fire, explosion or release, the Emergency Coordinator should monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

The Emergency Coordinator should provide immediately for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the Refinery.

The Emergency Coordinator should ensure that, in the affected area of the Refinery:

1. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
2. All emergency equipment listed in the Contingency Plan is cleaned and fit for its intended use before operations are resumed. The Emergency Coordinator should notify the Region V, U.S. EPA Administrator, and appropriate State and local authorities, that the facility is in compliance with the requirements set out below before operations are resumed in the affected area.

The Emergency Coordinator should note in the operating record the time, date, and details of any incident that requires implementing the Contingency Plan. Within 15 days after the incident, a written report on the incident should be submitted to the Region V, U.S. EPA Administrator, which includes:

- (1) Name, address, and telephone number for the Refinery;
- (2) Date, time, and type of incident (e.g. fire, explosion);
- (3) Name and quantity of material involved;
- (4) The extent of injuries, if any;
- (5) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(6) Estimated quantity and disposition of recovered material that resulted from the incident.

A copy of this Contingency Plan is maintained at the Refinery. In addition, a copy of this Plan has been submitted to local police and fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services. This Plan will be timely reviewed and amended if necessary.

ROCK ISLAND REFINING CORPORATION

INDIANAPOLIS, INDIANA

SPILL PREVENTION CONTROL AND
COUNTERMEASURES PLAN

(SPCC PLAN)

Updated
September 1980
August 1982
May 1983
June 1984

OIL POLLUTION PREVENTION
General Information

Name and Location:

Name: Rock Island Refining Corporation Phone: 317-872-3200
Location: 5000 West 86th Street
Indianapolis, Indiana 46268

Name, address and phone number of area manager:

Name: Micheal R. Renfrew, Plant Mgr. Phone: 317-291-4214
7720 Eagle Valley Pass State: Indiana
Indianapolis, Indiana Zip: 46224

Type Facility: Crude Oil Refinery with Loading Rack and
Tank Farm

Refinery Capacity: 44,000 BPSD
Loading Rack: Yes
Tank Farm: 1.9 MM Bbls.

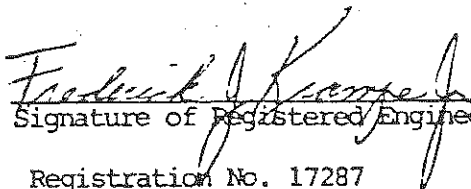
Name and telephone number of person responsible for oil spill prevention
at facility:

Name: W. E. Laque Phone: 317-298-7494

Certification

I hereby certify and attest that I am familiar with the facility and
the information contained in this plan and that to the best of my
knowledge and belief such information is true, complete and accurate,
and this plan has been prepared in accordance with good engineering
practices.

Frederick J. Krampe
Name of Registered Engineer


Signature of Registered Engineer

Date: 11 June 84

Registration No. 17287

Spill Record

1. This facility, over the past 12 months has not had a reportable spill.
2. Description of any reportable spills are given in the supplementary material, including corrective action taken for preventing recurrence.

Prediction of Potential Spills

1. Possible spill sources:

<u>Source</u>	<u>Type of failure</u>	(bbls.)
		<u>Maximum Volume</u>
Tank overflow	Overflow	1,000
Tank rupture	Rupture	400,000
Line leak	Leak	100
Process vessel rupture	Rupture	200
Loading rack	Overflow	200
Trucks	Road Accidents	200

Spill Prevention Plan Checklist

1. Secondary containment or diversionary structures are used for possible spill sources:

<u>Source</u>	<u>Type of Containment or Diversionary Structure</u>
Tank	Dikes
Process Area	Curbing and drains to A.P.I. Separator
Loading Rack	Catch Basins and drains to A.P.I. Separator

Facility Drainage

1. Process Area:

Any spill occurring within the process area flows through the unit drains to an A.P.I. Separator, where oil is separated from water by gravity, with oil pumped to slop tank, and water treated before discharge to holding basin and thence to City Sanitary Sewer.

2. Storage Tanks:

- A. Tank material and construction complies with conditions of storage and material stored.
- B. Tanks are separated by dikes.
- C. Diked volume is greater than tank volume.
- D. All tanks are visually inspected on a periodic basis.
- E. Tanks are engineered with one or more of the following fail safe devices:
 - (1) Adequate tank capacity to prevent overflow.
 - (2) Adequate vacuum protection.
 - (3) A radio system is in use in the refinery where personnel and others are in direct communication to notify parties concerned in case of spill emergency.
 - (4) Tanks are gauged automatically with periodic manual verification.

3. Storage tank area drainage:

- A. Drains of secondary containment are closed when rainwater is drained.
- B. Drainage from secondary containment is conducted under surveillance of authorized person. Name and title of authorized person: Nate McDonald, Area 4 Supervisor.
- C. Other: Any oily water removed from secondary containment flows through an oily sewer line to an A.P.I. Separator for separation, treatment, and discharge to aeration ponds. Ponds are capable of holding approximately seven (7) days water discharge.
- D. Tank dikes are drained under controlled conditions after rain has ceased.

4. Loading Rack Area:

- A. Loading rack drainage flows into catch basin and then to API separator.
- B. In order for the loading to occur, a ground has to be manually attached to the truck. In the event of vehicle departure, the ground is broken and the loading system shuts down.
- C. Prior to and after filling all tank truck outlets are examined for leakage.

PERSONNEL, TRAINING AND SPILL PREVENTION PROCEDURES

1. Personnel are properly instructed in the following:
 - A. Operation and maintenance of equipment to prevent oil discharge.
 - B. Applicable pollution control laws, rules and regulations.
2. Spill prevention briefings for the operating personnel are conducted on a periodic basis.

Action Plan (suggested plan outline to be used if spill should reach water)

- A. Contain spill at point where no further contamination is apparent by:
 1. Dam, if feasible
 2. Absorbent material

EMERGENCY PHONE NUMBERS

1. National Response Center 1-800-424-8802
2. Action Center:

Name: U.S. E.P.A. District Office Street: 536 S. Clark St.
City: Chicago State: Illinois 60605
Telephone: (312) 353-2318 (24 hr. number)
3. Communication (telephone numbers)
 - A. Federal EPA (312) 353-2318
 - B. State EPA Refer to Indiana Stream Pollution Board
 - C. Indiana Stream Pollution Board 24 hr. no. 633-4360
633-0144 633-0684
 - D. Pike Township Fire Department 356-6366 Emergency
299-0424 Business
4. Immediate Work Force:
 - A. List names and telephone numbers of your own people who would be immediately available on a 24-hour basis.

(1) ALL EMPLOYEES AT HOME AND NOT ON DUTY

B. List your own equipment, such as dozers, trucks, etc. that would be immediately available on a 24-hour basis.

- (1) One (1) - Tractor with back hoe and front scoop.
- (2) One (1) - 1-Ton Dump Truck
- (3) Six (6) - 1/2 and 3/4 Ton Pick-up Trucks

C. List men and equipment that a sub-contractor could make immediately available on a 24-hour basis, also list the telephone numbers of the people to call.

- (1) Spill Recovery of Indiana
P. O. Box 34337
Indianapolis, IN 46234
(317) 291-3937 (24-hr. number)
Mr. John Fedder
Mr. John Simms

- (2) Ace Oil Service
876 Otter Creek Road
Oregon, OH 43616
(419) 726-1521
Mr. Dennis Siefky

- (3) Ferguson Harbor Service
P.O. Box 8153
Nashville, TN 37207
(615) 227-3395
Mr. Owen W. Ferguson

- (4) Coghill Septic Service
6095 S. 800-E
Zionsville, IN 46077
(317) 873-2552
John Coghill

- (5) Marko Excavating Company, Inc.
P. O. Box 1
Zionsville, IN 46077
(317) 873-2552
Bob Lear

Two (2) Dozers -- 3 Front End Loaders
One (1) Grader -- 2 Backhoes
Three (3) Dump Trucks -- 2 3/4 Ton Pick-up Trucks
Available Manpower -- Six (6) Operators and/or Drivers

(6) Baker, McHenry & Welch, Inc.
1750 West Michigan Street
Indianapolis, IN

(317) 635-1431

Person to Contact: Mr. Jack Paul
Bus. Phone (317) 635-1431
Home Phone (317) 759-7838

One (1) Backhoe One (1) Bobcat
One (1) Dump Truck One (1) Gallion Crane

Manpower Available: Four (4) Carpenters
Six (6) Laborers

All the above equipped with necessary tools and equipments.

DISCUSSION OF CONFORMANCE WITH
APPLICABLE GUIDELINES

1. Containment structures or equipment used in Rock Island's tank farm and process area to prevent discharged oil from reaching navigable waters are in the form of:
 - (a) Dikes or retaining walls sufficiently impervious to contain spilled oil.
 - (b) Curbs
 - (c) Culverting and/or sewers
 - (d) Spill diversion pond or retention ponds
 - (e) Sorbent materials, in this case, pads
 - (f) Sorbent materials, chemically treated such as, 3M oil sorbent type 126 sweep
 - (g) Bennett floating boom
2. Drainage from diked storage areas is restrained by valves to prevent spill. This drainage is handled by controlled release through water treatment system.

It is proposed to replace or clean all oil residue from diked areas and construct a suitable drainage system so as to empty run-off to Little Eagle Creek under controlled conditions, supervised by a competent individual. Storm water will be inspected as to quality before release. In some cases lift pumps will be required as the local topography does not completely lend itself to gravity drainage.

Valves are presently in use to restrict the flow of storm water into the API Separator for treating. A different configuration is planned to direct the water to the respective NPDES discharge points, being released under supervision via manually operated valves.

Plant drainage from undiked areas will be directed to a retention pond on the east side of the plant and to the creek on the west side. Curbed areas will be provided in spots where spills are not likely, with the water from all sources in the curbed areas leading to the API separator and thence through the treatment facilities.

STORAGE TANKS

All storage tanks containing oil are enclosed in dikes of sufficient height to contain greater than 100% of the storage capacity. Dikes have been in service several years and have proven capability to retain oil. An oil spill from any of the tanks would be contained in the dikes and removed or cleaned up by same means. Valves on tank dike drains would normally be closed so as to provide this means of safety.

All drainage complies with NPDES water quality standards.

Adequate records are kept of quality and quantity of drainage from open tank dikes and are compiled under the supervision of competent management personnel for all NPDES streams.

Above ground tanks have and will be inspected periodically to insure safe use by means of either a hydrostatic test, visual, or electronic devices especially constructed for this application. The tank farm is constantly being traveled by members of the pumping department and are instructed to report any leaks immediately. Leaks are also detected easily by discoloration of paint. Comparison records will be kept on various tanks as they are periodically opened and cleaned for change of service or for inspection.

Rock Island does not have any major tanks heated internally with steam coils. Heating is accomplished utilizing external sources.

Rock Island has installed remote gauging equipment so that farm transfers can be monitored, and to a degree controlled. This system consists of devices to indicate high levels and/or any abnormalities by activating audible and visual systems.

The plant at present has a radio communication network which includes the pumps and others engaged in tank farm assignments.

A fast response system is in the developmental stage and will ultimately enable personnel to read remotely tank levels and at the same time be recorded in a digital computer for retrieval.

The liquid level devices described will be tested periodically to insure proper operation.

The refinery is manned 24 hours per day by personnel engaged in tank farm activities, and who observe disposal facilities to determine if spill events are likely to occur.

Oil leaks from storage tanks which result in oil in diked areas are corrected and recovered for processing.

Mobile tanks used in the refinery are of small capacity and should pose no threat to oil contamination of NPDES discharge points.

PUMPING FACILITIES

All new underground piping installation will have protective wrapping and coating to prevent corrosion. At this time all buried lines uncovered for any reason are being placed overhead, if at all possible.

Pipe lines that are abandoned are drained and/or capped or blind-flanged at each terminal point and suitable identification furnished.

Pipe supports are constructed for maximum support and to allow for minimum abrasion and corrosion. Allowance for expansion and contraction are also provided.

This facility does not load railroad tank cars. At times light gases under pressure (butanes) are received but pose no threat as they are in vapor state under ambient temperatures.

TANK TRUCK LOADING

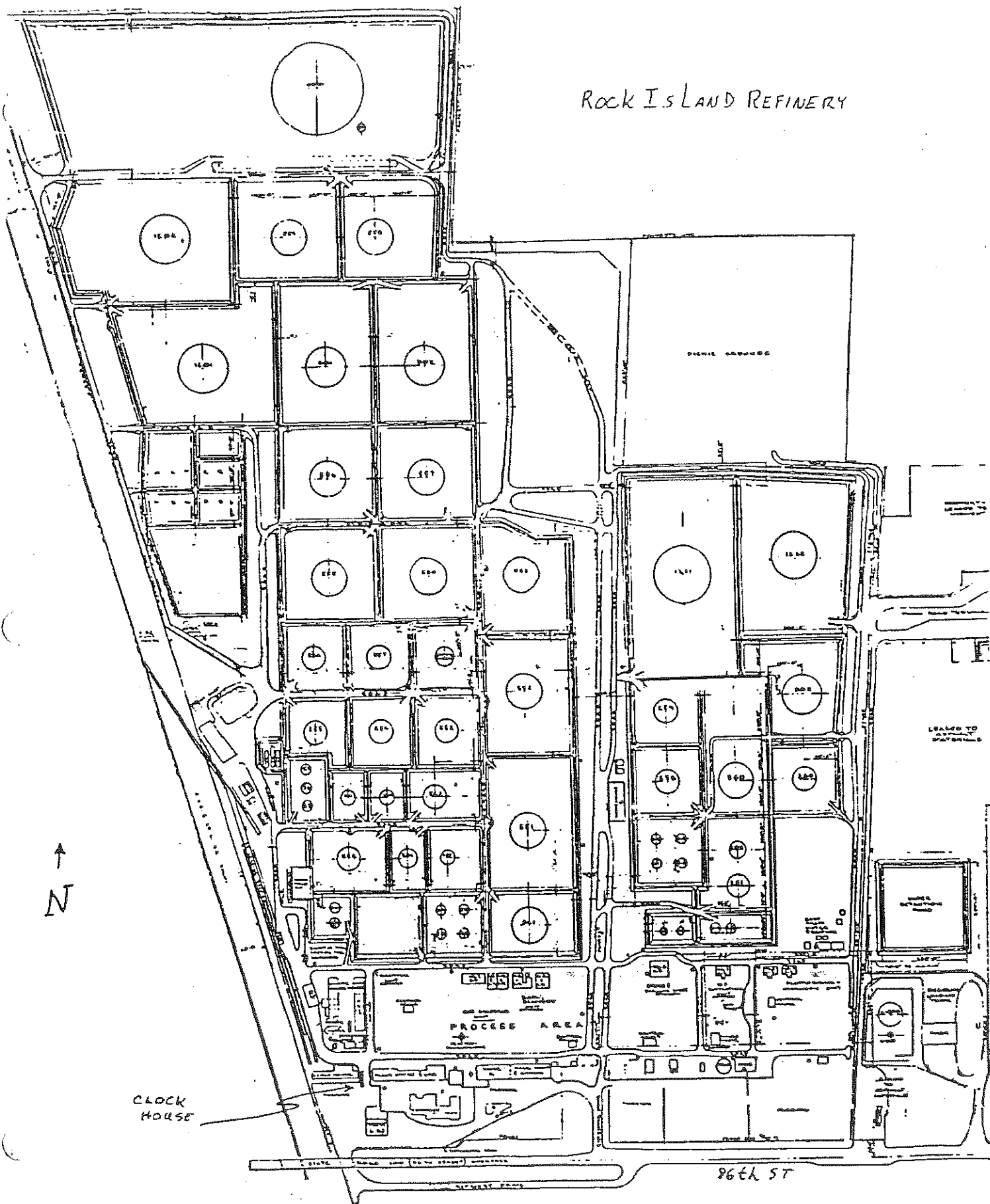
Tank truck loading facilities are revamped to conform with Department of Transportation requirements and also City of Indianapolis Transportation Control Plan. The project is completed, as is the vapor recovery system.

The tank truck rack is constructed with a drainage and catchment basin facility to preclude the loss of oil in case of overfilling of trucks.

Prior to departure of filled trucks, inspection is made of all drains to prevent leakage of liquid product.

Tank trucks, loading heavy fuels are not equipped with various devices described; loading is performed under plant supervision, minimizing possibility of overfilling. In case of spill, this oil solidifies and is manually moved out as solid waste.

ROCK ISLAND REFINERY



FIRE EMERGENCY
CALL OUT PROCEDURE

In case of fire at night, on weekends, or on holidays, when so requested by the Shift Supervisor, call the following employees:

1. Russ Bunton/Don Scott

(If Pumphouse, Tank
Farm or Loading Rack)

2. Bennie Tyler

3. Curt Sebastian

4. Duke Jamison

5. Walt Palmer

6. Ron Peters

7. Jack White

8. Danny Luttrell

9. Carl Shockley

10. Bob Wilson

11. George Schuetz

12. Bud Phillips

13. Max Good

14. Bob Anderson

15. Jim Crisler

16. Bill Laque

17. Bernard Smith

Ex. 6

PII

ROCK ISLAND REFINING CORP.

FIRE

EMERGENCY CALL-OUT PROCEDURE

In case of fire at night, on weekends, or on holidays,
when so requested by the Shift Supervisor, call the fol-
lowing employees:

1. RUSS BUNTON/DON SCOTT
1. BENNIE TYLER - Area 1
1. DUKE JAMISON - Area 2
1. CURT SEBASTIAN - Area 3
2. WALT PALMER
3. RON PETERS
4. JIM CRISLER
5. MIKE RENFREW
6. JACK WHITE
7. DANNY LUTTRELL
8. CARL SHOCKLEY
9. BOB WILSON
10. GEORGE SCHUETZ
11. MORRIS BUTCHER
12. BUD PHILLIPS
13. MAX GOOD
14. BOB ANDERSON
15. BOBBY CURRY
16. BILL LAQUE
17. FRED KRAMPE
18. BERNARD SMITH

(If Pumphouse,
Tank Farm or
Loading Rack)

n)

EX. 6
PII

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ROCK ISLAND REFINING CORP.

CLOCKHOUSE EMERGENCY PHONE LISTINGS

Blank - Test #	Bernard Smith	Pike Township
Jim Crisler	George Schuetz	Sheriff
Curt Sebastian	Carl Shockley	State Police
Bennie Tyler	Bob Wilson	Nora Security
Russ Bunton	Morris Butcher	St. Vincent E.R.
Don Scott	Bud Phillips	Spill Recovery
Walt Palmer	Bobby Curry	Power & Light
Ron Peters	Fred Krampe	State Board of Health
Danny Luttrell	Max Good	Mike Renfrew
Jack White	Bob Anderson	Bill Laque
Duke Jamison		

EVACUATION

Case 1. Week day, normal working hours

When a fire alarm sounds:

All Rock Island Personnel are expected to respond to the fire except those necessary to continue safe operation of other units not affected by the fire.

All contractors have been instructed to leave the premises:

1. Those in the west area via the clockhouse gate and assemble beneath bridge.
2. Those in east area via the east gate and assemble in east parking lot.

Case 2. Other than week day normal working hours

When a fire alarm sounds:

All Rock Island Personnel are expected to respond to the fire except those necessary to continue safe operation of the other units.

1/12/84

AGREEMENT FOR THE STAGING OF
MUNICIPAL FIRE AND EMERGENCY MEDICAL
UNITS DURING AN IN-PLANT EMERGENCY

Municipal Fire and Emergency Medical Services will respond only to a call placed by authorized Rock Island Refining Corporation personnel.

FIRE OR MAJOR EMERGENCY

When Municipal Fire Department assistance is required, Pike Township Fire Department will respond initially with 3 engines, an ambulance and a rescue squad.

Incoming fire equipment will be staged at Pike Township Fire Station #3 (Station 13) at 4003 W. 86th Street. The first responding unit will go directly to the Rock Island clockhouse. The Municipal Fire Officer in charge will respond to the clockhouse for initial information necessary for tactical deployment under Rock Island direction. When outside help is requested, the watchman must be notified so that he/she may be prepared to meet the incoming Fire Chief.

Municipal fire units will proceed into the plant only after an escort has been assigned to them. This applies to all outside units, regardless of final destination.

Variations in staging areas or command post locations may be implemented only when necessary and only under informed consent of both the Municipal Fire Officer in charge and the Rock Island personnel directing the fireground.

Additional fire and emergency medical units will be summoned through the Municipal Fire Officer in Charge as determined by the needs and requests of Rock Island fireground personnel.

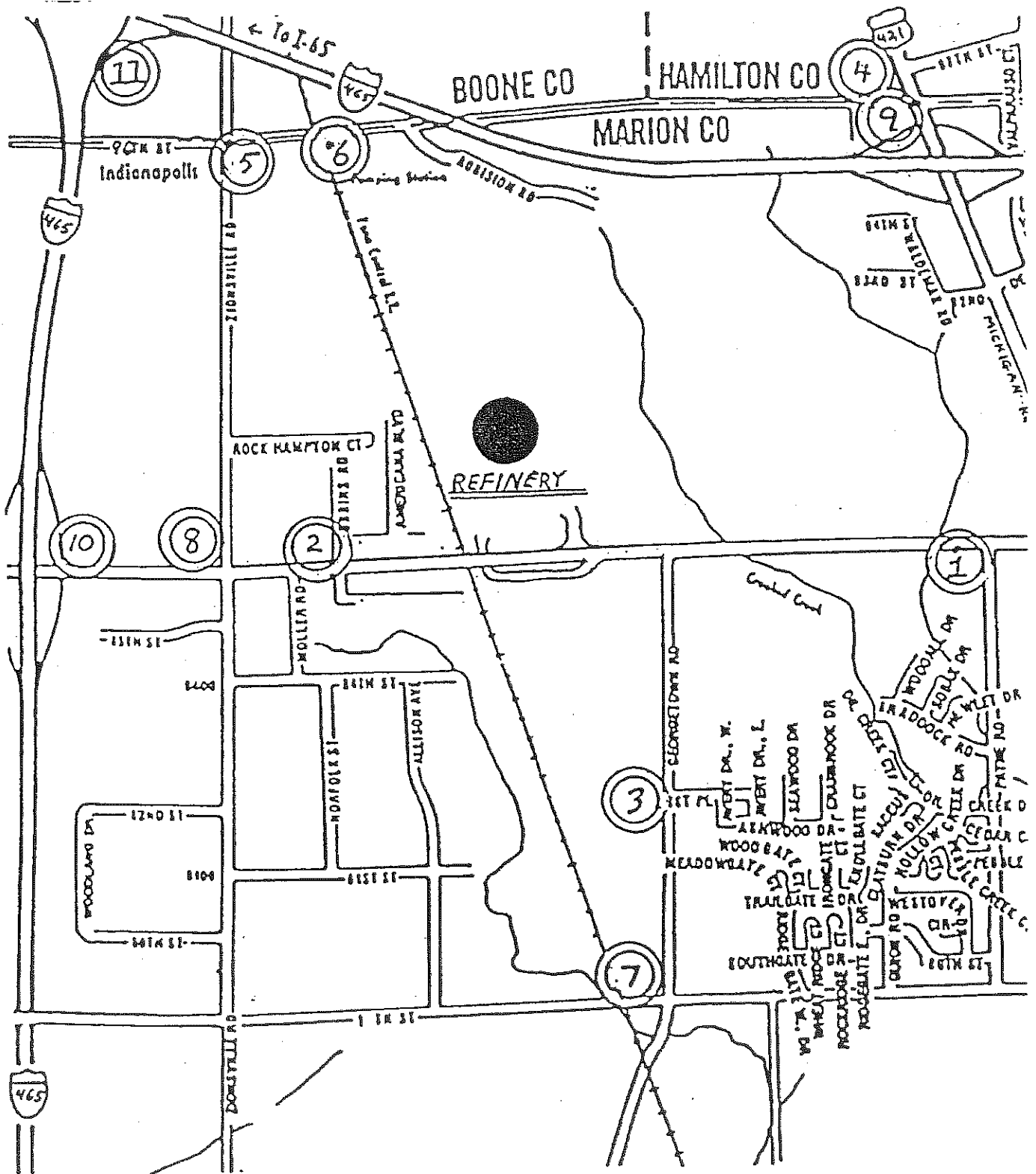
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EMERGENCY MEDICAL SERVICE

When Emergency Medical Service is requested from Pike Twp. Fire Department, an initial response of one ambulance may be expected. During those times when the nearest ambulance is unavailable, an engine and an ambulance may be expected.

Responding units will arrive at the main gate. The Watchman must be notified of requests for outside Emergency Medical Service so that the main gate area may be maintained for incoming emergency units. Emergency Medical units must have a Rock Island escort before entering the plant. Also, Emergency Medical personnel should be wearing hard hats before leaving their vehicles within the plant (inside main gate).

When a situation exists that requires advanced emergency care, a paramedic unit from Washington Township will also respond. In these cases, the watchman should be aware of a third responding unit and an additional escort must be available.



January 12, 1984

AGREEMENT FOR THE STAGING AND DEPLOYMENT OF LAW
ENFORCEMENT & SECURITY PERSONNEL DURING AN IN-PLANT EMERGENCY

FIRE OR MAJOR EMERGENCY

Law enforcement personnel will respond to a call placed by authorized Rock Island Refining Corporation personnel. Nora Security will respond to a call placed either by authorized Rock Island Refining Corporation personnel or by the Marion Co. Sheriff's Department for Rock Island Refining Corporation. Routinely, Nora Security notification will be made through the Sheriff's Department.

One unit each from: The Indiana State Police, The Marion County Sheriff's Department and Nora Security will respond to the clockhouse parking lot to establish Command Post Procedures. The clockhouse parking lot will be the initial Command Post Area, unless otherwise notified by Rock Island or Pike Township Fire Department personnel.

Nora Security will assign its remaining three (3) units to establish the Preliminary Perimeter (see below). These Nora units will be relieved by State and County units as soon as practical. Upon relief, Nora units will either be reassigned to Plant Security or other duties as directed by the Command Post.

Marion County Sheriff's Department units will relieve Nora Security at the Preliminary Perimeter. The Sheriff's Department Command Unit and Dispatch Center will coordinate the establishment of the main perimeter and assign units to do so based on the nature of the problem.

The primary function for Indiana State Police units will be control of interstate traffic, or if warranted, interstate closure (I-465). State units may also be helpful in assisting Marion County units in the establishment of a Main Perimeter.

PRELIMINARY PERIMETER LOCATIONS:

1. 86th Street and Vincennes Avenue (Fortune Park)
Stop Westbound traffic
2. 86th Street and Robbins Road
Stop Eastbound traffic
3. 81st Street and Georgetown Road
Stop Northbound traffic

MAIN PERIMETER LOCATIONS:

4. 96th Street and Michigan Road
Stop Westbound traffic
5. 96th Street and Zionsville Road

Stop Eastbound traffic

6. 96th Street and Conrail R.R.
Stop Southbound access on R.R. right-of-way
7. 79th Street and Conrail R.R.
Stop Northbound access on R.R. right-of-way
8. 86th Street and Zionsville Rd.
Stop Eastbound traffic
9. 86th Street and Payne Road
Stop Westbound traffic
10. I-465 and Michigan Road (Or I-465 & Meridian)
Stop Westbound I-465 and on ramp to Westbound I-465
11. I-465 and 86th Street
Stop Northbound I-465 and on ramp to Northbound I-465
12. I-465 to I-65 - Boone County
Stop Eastbound I-465 traffic

All responding units which have not been given an assignment, should report to the Staging Area at Pike Township Fire Station 13, 4003 West 86th Street. Units awaiting assignment or reassignment, should not come onto the Refinery premises. If conditions warrant, the staging area will be moved to a more tenable location as determined by Command Post personnel. (See map on the following page)

EMERGENCY RESPONSE TEAM

The duties of the emergency response team have been modified slightly to provide back-up for those people assigned to start fire pumps. There are now two people responsible for making sure the fire pumps are started and one responsible for checking the pump periodically. Shift employees assigned to the emergency response team are as follows:

AREA 1 LEAD OPERATOR

Go to scene and help set up and operate fire truck.

AREA 2 LEAD OPERATOR

Get fire truck to the scene.

*AREA 3 LEAD OPERATOR

Make sure east end fire pump(s) have been put on, then go to the scene and help set up and operate fire truck.

*AREA 1 NO. 2 OPERATOR

Make sure that spray pond fire pump(s) have been put on, then proceed to the scene and help as directed. If the fire is at the Pumphouse, Tank Farm, or Loading Rack, check fire pump operation periodically.

AREA 1 NO. 3 OPERATOR

Proceed to fire and help as directed.

AREA 3 NO. 3 OPERATOR

Get fire truck to the fire and help as directed.

LABORATORY NO. 3 OPERATOR

Get fire truck to the fire and help as directed.

APEA 1 HELPER

Proceed to fire and help as directed.

AREA 2 HELPER

Proceed to fire and help as directed.

AREA 3 NO. 4 OPERATOR

Start fire pump at East Retention Pond. Check operation of pump periodically.

*TRANSFER DEPARTMENT NO. 1 OPERATOR A

Start fire pump(s) at spray pond as per procedure. Periodically check pumps and provide operations assistance for controlling emergency as needed.

*TRANSFER DEPARTMENT NO. 1 OPERATOR B

Proceed to emergency and help as directed

*TRANSFER DEPARTMENT NO. 4 OPERATOR

Shut down any off-loading operations and proceed to the emergency and help as directed.

*Denotes modification to procedures.

EMERGENCY DUTIES FOR THOSE NOT ON SHIFT
EMERGENCY RESPONSE TEAM - OPERATIONS

With the adoption of the new Area Concept and the revision of the emergency response team, several employees per shift will not respond to the emergency. Even though these employees will not respond, they will have assigned responsibilities as a part of the overall team.

Area 1

No. 1 Operator-FCC	Control processes and provide operational assistance for control of the emergency as outlined in emergency procedures or as directed. (No. 1 Operators to radio location of emergency.)
No. 1 Operator-Gas Plant	
No. 4 Operator	

Area 2

No. 1 Operator-Crude	Control processes and provide operational assistance for control of the emergency as outlined in emergency procedures or as directed.
No. 1 Operator-Alky	
No. 2 Operator-SRU	
No. 4 Operator	

Area 3

No. 1 Operator-H/P	Control processes and provide operational assistance for control of the emergency as outlined in emergency procedures or as directed. No. 4 Operator to periodically check fire pumps.
No. 1 Operator-ROSE	
No. 4 Operator-(after starting fire pumps)	

Area 4

No. 1 Operator	Control processes and provide operational assistance for control of the emergency as outlined in emergency procedures or as directed. The Operator remaining at Pumphouse is to periodically check fire pumps.
No. 2 Operator-(after starting fire pumps 2100-0500)	

Watchman

Makes all necessary phone calls, meets incoming emergency units, if necessary, keeps all unnecessary personnel outside of plant, provides any other assistance as directed.

Although the above employees will not be responding throughout the plant to fight fire, they will still be responsible for fighting fires in their work area which are still in the incipient stage. (Which can be controlled with portable extinguishers and small hose lines.)

January 19, 1984

NEIGHBORING FACILITIES NOTIFICATION

If it becomes necessary to notify neighboring facilities of an emergency at Rock Island, the following locations can be contacted at these respective phone numbers.

Panhandle Eastern	873-2410 (24 hours)
Mr. Sutton, Area Superintendent	
A. E. Huser, Plant Supervisor	
R. D. Markley, Field Supervisor	
Shell Pipe Line Corporation	
Offices	872-7440 (421)
Zionsville Plant	872-4110 (96th Str.)
Wood River Control Center (618)	254-7467 (24 hours)
Crooked Creek Gun Club	872-9118
Rock Island Park	R.I. Extension #336
Midwest Oil Transit	872-5580
Park Road Terminal	R.I. Extension #327 872-9003
Asphalt Materials	872-6010
Residual Oil Terminal	R.I. Extension #326 872-9026
Wake Up Oil Company	872-5505
Golden Imperial	875-8500

EMERGENCY NUMBER

AMBULANCE	Pike Township	356-6366
	Zionsville	873-3363
FIRE DEPTS.	Pike & Washington Twps.	356-6366
	Zionsville Fire Dept.	873-3344
POLICE & SECURITY DEPTS.	Marion County Sheriff	633-5151
	Indiana State Police	899-8577
	Nora Security	259-1166
CLINICS	Methodist Health Care Clinic 1950 West 86th St.	872-4775
	Methodist Health Care Clinic 1919 North Capitol	926-4471 (OPEN 24 HOURS)
	Indianapolis Industrial Clinic 320 North Meridian	635-4425 (OPEN 24 HOURS)
HOSPITAL EMERGENCY	St. Vincent(Switchboard)	871-2442 2001 W. 86th
	St. Vincent(Records)	871-2220 2001 W. 86th
	St. Vincent(Emergency)	871-2121 2001 W. 86th
	Methodist	924-8355 1604 N. Capitol
	Winona Memorial(Indpls)	927-2341 3232 N. Meridian
	Community	353-5457 1500 N. Ritter
	Witham Memorial (Lebanon)	1-482-2700 1124 N. Lebanon
	Riverview(Noblesville)	773-0760 395 Westfield Rd. Ext.235
OTHERS	Spill Recovery of Indiana	291-3972
	Indianapolis Power & Light	637-0377
	Dr. Elliott Yolles (eyes)	257-3325 9100 Meridian Sq. 259-4080(Home) 926-3466(Page #)

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OIL SPILL

1. INDIANA STATE BOARD OF HEALTH
(A) 24 HR NUMBER 633-0144
2. NATIONAL RESPONSE CENTER
1-800-424-8802
3. U.S. EPA REGION 5
(A) 24 HR NUMBER 1-312-353-2318
(B) GREG VANDERLAAN 1-312-886-6217
4. MARION COUNTY HEALTH AND HOSPITAL CORPORATION
ROSEMARY N. HANSELL 633-3691

ROCK ISLAND REFINING CORP.

THIRD ANNUAL CONTINGENCY PLAN MEETING MINUTES

The third (3rd) Annual Contingency Plan Meeting began at 10:08 a.m., Thursday, July 26, 1984, with brief television coverage by Jonas Chaney of Channel 8. The meeting was called to order by Walter Palmer, Rock Island Safety/Security Manager. Walt then introduced William E. Huff, President of Rock Island, who welcomed everyone present on behalf of Rock Island. Bill, in his opening remarks, referred to the very recent Lamont, ILL, Union Oil explosion and fire.

Walt had everyone present introduce themselves. Present were:

Ron Peters - Fire Protection and Safety Coordinator - comes to us with ten (10) years safety experience and with experience in the construction of Atomic Energy Plant Generators
 Kay Newman - Safety Secretary
 Jeff Sipes - Safety Intern, Fire Technology and Safety student at Oklahoma State University
 David Goodrow - Safety Intern, Industrial Risk Management student at Eastern Kentucky University
 Jerry Davis - Rock Island Public Relations Director
 Sgt. Richard Gates - Marion County Sheriff's Department Communications Division
 First Sgt. Jim White and Sgt. John Glenn - Indiana State Police, District 52
 Chuck Wilson and Mike Sorg - Indiana Air Pollution Control
 John Fetter - President, and Andy Jacobs, Colonel - Nora Security
 Chief Chuck Berry, Lt. Mike Tyler, Capt. Rick Pohlman, and Assistant Chief Tim Faulk - Pike Township Fire Department
 Bill Laque - Environmental Coordinator - Rock Island - Originator of Rock Island's Contingency Plan
 Jim Renshaw - Administrative Resident - St. Vincent's Hospital

Walt reviewed the history of the Contingency Plan and incidents which have activated the plan.

1. Gas vapor cloud release of 1/12/82
2. Gasoline transport truck overturned south of refinery 7/-/82

In another incident, a power line fell outside the plant boundaries - winter 1984 - and a Pike truck backup was called. The Contingency Plan was not activated in its entirety. (See pg 2, remarks by Chief Berry).

Contingency Plan updates were passed out.

LAND REFINING CORP.

A slide show followed showing the areas of new process and equipment installed by Rock Island since the last meeting:

1. Rock Island has leased the railroad from 86th to 96th streets. Numerous rail cars of LPG and ethanol alcohol are being unloaded in the Refinery at a site with approved D.O.T. "Hazardous Materials" unloading procedures. There is sixteen (16) hour attendance during the activity of unloading of both types of materials.
2. Asphalt Materials area south of parking lot - leased from R.I. - WE ARE NOT RESPONSIBLE for that area.
3. Slide showing location of process unit for the manufacture of leaded hi-octane aviation gasoline.
 - a. Tetraethyl lead bldg.
4. Slide of deluge protection at Park Road Loading Terminal where Avgasoline is being loaded into transports.

A Question and Answer period followed the slides. Chuck Berry recommended that Contingency Plan response be divided into "Planned Incident Types." This would allow activation of parts of the "Plan" when activation of the whole plan is not necessary. The three levels of incident which Chief Berry recommended were:

1. Within Rock Island - self-contained fire; able to be taken care of internally
2. Medical Emergency
3. Notify Pike - a fire which requires the assistance of Pike Township Fire Department
4. General Emergency - Contingency Plan in action - how to rotate people in and out as needed in emergency. Noted staging area for emergency is Pike Township Station #3

Chief Berry also stated that "access to scene" was critical to a fire for Rock Island and the Pike Fire Department. Also a "simulation" of the Contingency Plan needs to take place in order to see just how well it works.

Bill Parker, President of Nora Security, stated that his job is to dispatch cars to Rock Island, seal off the area, and allow emergency vehicles only on scene, and to fall back to the plant boundaries when relieved by local law enforcement agencies.

First Sgt. Jim White of the Indiana State Police, District 52, stated that the people of the community were his first responsibility. The Indiana State Police will therefore participate in the Contingency Plan Activation as much as possible.

John Fetter, President of Spill Recovery of Indiana, Inc., said that most of his people were familiar with Rock Island and were prepared for possible hazardous material clean up and containment at the site.

LAND REFINING CORP.

First Sgt. Jim White said that car stickers and name tags were a good idea for emergency situations. He was told that the Rock Island Management had white and blue car stickers and that the hourly people had green car stickers.

Sgt. Richard Gates of the Marion County Sheriff's Department, Communications Division, remarked on the fact that if we were to have a fire of the magnitude of those mentioned, long term involvement would be the situation. He stated that barricades need to be added to his equipment.

A tentative date in August, 1984, is targeted for an exercise simulating an emergency requiring the use of the Contingency Plan. Chuck Wilson, Indiana Air Pollution Control, was asked if he would notify the state and he replied that he would. He informed those present that the function of his department is to identify the emission of hazardous material and to monitor its direction of travel and to notify the proper agencies so they can provide protection for communities threatened and they can decide whether evacuation is necessary or not.

Walt Palmer stated that we have an Emergency Response Team at Rock Island and not a Fire Brigade. The E.R.T. is comprised of people who can immediately leave their post in order to respond to any emergency, including fire. He also said that from the information garnered at the Boots and Coots Seminar that he recently attended in Urbana, ILL, it can take considerable time after the beginning of a large storage tank involvement before the fire-fighters would get to the point of putting the fire out. BUT, there is no way to totally plan for a situation like that in Lamont, ILL, at the Union Oil Refinery.

Chuck Berry of Pike Township Fire Department stated that all Pike personnel carry I.D.'s. During an emergency NO ONE should drive within R.I. perimeters in their own vehicle. All should go to Station #3 where they will be assigned to a vehicle.

Chuck Wilson of the Indiana Air Pollution Control Board asked if R.I. had interfaced with Grissom AFB as a source of foam. Walt answered that we have talked to Grissom and to the Indianapolis International Airport, but that they use a different kind of foam. Walt said additional foam was available by truck from Chicago and by plane from Lionville, PA. It was suggested that R.I. get with the State Police to coordinate efforts for an escort from Chicago for a foam truck. Rock Island has approximately 3000 gallons of foam concentrate on hand. This 3000 gallons includes 500 gallons available for community emergencies when authorized by the consignor.

There being no further questions, answers, or comments, the meeting was adjourned at 11:15 a.m. A brief social/business period followed.

Respectfully submitted,

Katherine J. Newman
Katherine J. Newman, Secretary

SECTION VIII

ACCIDENTAL IGNITION OR REACTION OF
IGNITABLE, REACTIVE OR
INCOMPATIBLE WASTES

Ignitable, reactive or incompatible hazardous
wastes are not treated or stored at the refinery.

SECTION IX

TRAFFIC PATTERNS

All wastes stored or treated onsite are transported by off-road vehicles. A two-lane asphalt road provides access to the storage and treatment facilities.

SECTION X

FACILITY LOCATION INFORMATION

100-year floodplain. None of the storage and treatment facilities at the refinery are within the 100-year floodplain. See the Federal Insurance Administration flood map attached hereto as Appendix B.

SECTION XI

PERSONNEL TRAINING

The following material constitutes the refinery's PERSONNEL TRAINING PROGRAM as required by 40 C.F.R. § 264.16. This program is directed by William E. Laque, Coordinator of Environmental Affairs, and includes instruction for refinery personnel regarding hazardous waste management procedures and contingency plan implementation of those procedures. This training program is designed to ensure that refinery personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems. It includes:

- (1) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;
- (2) Procedures for using two-way radio communications;
- (3) Responses to fires or explosions; and
- (4) Shutdown of operations.

Because of the small number of personnel involved in hazardous waste management at the refinery, these personnel have received the training through on-the-job training. Each of the refinery personnel have or will successfully have completed this training program on or before May 19, 1981. Any employee assigned to such a position after the effective date of these regulations will not be assigned in an unsupervised position until they have completed this training program. This program shall be completed by each new employee no later than six months after the date of their employment for or assignment to this responsibility. Each of the refinery personnel will take part in an annual review of this training program for his or her particular responsibility.

The job title for each position at the refinery related to hazardous waste management and the name of the employee filling each job is as follows:

<u>Job Title</u>	<u>Designated Employee</u>
Coordinator of Environmental Affairs	William E. Laque
#2 Operator	Ed Suda
#2 Operator	David Meier
#2 Operator	Tim Schooler
#2 Operator	Tom Schmerber

A written job description for the #2 Operator position is attached hereto as Appendix C. Before assignment to the #2 Operator job position, an applicant must pass satisfactorily the test attached hereto as Appendix D.

The materials K049, K050 and K051 and the vacuum filter cake resulting from treatment of those materials are classified by EPA as hazardous wastes because of the presence of lead and chromium. While the lead and chromium levels are relatively low and this material is presently a candidate for delisting, prudence dictates that employees never physically contact these materials. To minimize such exposure, employees are required to use Class A protective clothing. Employees are generally instructed as to the potential danger of these wastes and are further instructed to avoid contact and to wear protective clothing. Employees are also given instructions as to safety procedures, such as fire emergency responses, as more fully described in Section VII (the CONTINGENCY PLAN).

Records documenting the training or job experience required for hazardous waste management positions are maintained at the refinery. These training records will be maintained on current employees until closure of the storage and treatment facilities and will be kept for former employees

for at least 3 years from the date the employee last worked
at the refinery.

SECTION XII

CLOSURE PLAN

- A. Title and Purpose
- B. Facilities and Waste Description.
- C. Closure Plan
 - 1. Closure Criterion
 - 2. Disposal or Decontamination of Equipment
 - 3. East and West API Oil-Water Separators
 - 4. API Separator Sludge Receiving Tanks
 - 5. Vacuum Filter
- D. Closure Cost Estimate
- E. Closure Schedule
 - Schedule A.

A. Title and Purpose.

A copy of this Closure Plan and all revisions thereof is and will be maintained at the refinery until closure is completed and certified in accordance with 40 C.F.R. § 264.115.

The purpose of the Plan is to demonstrate compliance with the requirements of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6901, et seq., and the applicable regulations promulgated pursuant thereto, 40 C.F.R., Part 264.

B. Facilities and Waste Description.

The operations of the refinery involve the following waste treatment and storage facilities: an East API oil-water separator; a West API oil-water separator; an API separator sludge receiving tank; and a vacuum filter. These facilities may be subject to the closure requirements of 40 C.F.R., §§ 264.111-265.115 and 264.197.

These treatment and storage facilities are subject to the closure requirements because some of the wastes now generated at the refinery have been listed as hazardous by

the United States Environmental Protection Agency (EPA). 40 C.F.R., Part 261. Thus, 40 C.F.R., Part 261, designates slop oil emulsion solids (K049), heat exchanger bundle cleaning sludge (K050) and API separator sludge (K051) as hazardous wastes because of the lead and chromium levels possibly contained in those materials. The EPA has preliminarily determined that these wastes generated at the refinery are nonhazardous. The Company's delisting petition and EPA's preliminary determinations are attached as Appendix E.

C. Closure Plan.

This Plan identifies and describes the steps necessary to close each of the refinery's hazardous waste storage and treatment facilities at any point during the intended operating life of the refinery or at the end of its intended operating life. The facilities are estimated to be closed in the year 2011. The estimate of the expected year of closure for these facilities is based on their remaining useful life.

1. Closure Criterion. The Plan, as more fully described below, is designed in a manner to minimize the need for further maintenance; and control, minimize or eliminate, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall,

or waste decomposition products to the groundwater, or surface waters, or to the atmosphere.

2. Disposal or Decontamination of Equipment. When closure is completed, all the facilities' equipment and structures will have been properly decontaminated by removing all hazardous wastes and residues.

3. East and West API Oil-Water Separators. The east and west API separators have a total process design capacity of 3,456,000 gallons per day. The final volume of sludges will be removed and treated by vacuum filtering, and the resulting dewatered filter cake will be properly disposed of. The separators will subsequently be decontaminated by washing with water. The water washings also will be treated by vacuum filtration to remove solids, with the filtrate discharged to the municipal sewer. Within 90 days after receiving the final volume of wastes, all materials in the separators will be removed. Any closure related activities will be completed within six months after receiving the final volume of wastes.

The cost of closing the East and West API separators is based on each separator containing 312 cubic yards of material which is reduced to 156 cubic yards after dewatering in the filter press. At an assumed cost of disposal of \$15

per cubic yard, this results in a waste disposal cost estimate of \$4,680. To remove and process the separator wastes and decontaminate the separators will require approximately 88 man-hours. At \$20 per man-hour, this calculates to \$1,760, for a total closure estimate for the East and West API oil-water separators of \$6,440 (in 1981 dollars). There will not be any post-closure responsibilities associated with the separators.

4. API Separator Sludge Receiving Tank. The API separator sludge receiving tank has a cumulative design capacity of 6,000 gallons. The final volume of stored material will be removed and treated in the vacuum filter with the resulting dewater sludge being properly disposed of. The tank will then be decontaminated by successive flushings with water. The water washings will be treated in the vacuum filter to remove solids, the filtrate passed through the onsite aeration treatment system and discharged to the municipal sewer. Within 90 days after receiving the final volume of wastes, all materials in the tank will be removed. Any closure related activities will be completed within six months after receiving the final volume of wastes.

The tank holds 30 cubic yards of material which will be reduced to 15 cubic yards after dewatering in the vacuum filter. At an assumed cost of disposal of \$15 per

cubic yard, this results in a waste disposal cost estimate of \$225. To remove and process the wastes in the tank and decontaminate the tank will require approximately 8 man-hours. At \$20 per man-hour, this calculates to \$160. In addition, a vacuum filter truck will be needed to transfer the material from the tank to the vacuum filter at an estimated cost of \$240, for a total closure estimate for the tank of \$625 (in 1981 dollars).

There will not be any post-closure responsibilities associated with the tank.

5. Vacuum Filter. The vacuum filter has a capacity of approximately 5 cubic yards. The final volume of wastes will be removed and properly disposed of. The vacuum filter will then be decontaminated by flushing with water. The water washings will be passed through the on-site aeration ponds and discharged to the municipal sewer. Within 90 days after receiving the final volume of wastes, all materials in the vacuum filter will be removed. Any closure related activities will be completed within six months after receiving the final volume of wastes.

The cost of closing the vacuum filter is based on the estimate that 5 cubic yards of material will have to be disposed of. At an assumed cost of disposal of \$15 per cubic

yard, this results in a waste disposal cost estimate of \$75. To remove and process the wastes and decontaminate the vacuum filter will require approximately 8 man-hours. At \$20 per man-hour, this calculates to \$160, for a total closure estimate for the vacuum filter of \$235 (in 1981 dollars).

There will not be any post-closure responsibilities associated with the vacuum filter.

D. Closure Cost Estimate.

The 1981 closure cost estimate for the waste facilities at the refinery is \$7,300. The cost of closing each of the facilities is estimated for that point in its operating life that would be the most expensive. A new closure cost estimate will be prepared whenever a change in the Plan affects the cost of closure. In addition, the latest closure cost estimate will be adjusted annually using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. The inflation factor must be calculated by dividing the latest published annual Deflator by the Deflator for the previous year. The result is the inflation factor. The adjusted closure cost estimate must equal the latest closure cost estimate times the inflation factor. See Schedule A.

E. Closure Schedule.

The refinery will submit this Plan to the Regional Administrator at least 180 days before the closure of any of these facilities is begun. The Regional Administrator will approve, modify or disapprove the Plan within 90 days of its receipt.

Within 90 days after receiving the final volume of wastes, or 90 days after approval of the Plan, if that is later, the refinery will treat or remove from the site all wastes in accordance with the approved Plan. The Regional Administrator may approve a longer period in which to effect closure. The refinery will complete closure activities in accordance with the Plan and within 180 days after receiving the final volume of wastes (or 180 days after approval of the Plan, if that is later), unless the Regional Administrator approves a longer closing period.

When closure is completed for any of these facilities, the refinery will submit to the Regional Administrator a certification both by the refinery and an independent registered professional engineer that the facility has been closed in accordance with the appropriate specifications in the Plan. This Plan may be amended from time to time and will be amended any time changes in operating plans or facility

design affect the Plan, or whenever there is a change in the expected year of closure of the facility. The Plan will be amended within 60 days of the changes.

A copy of the financial assurance mechanism adopted in compliance with 40 C.F.R. § 264.143 is attached as Appendix F.

SCHEDULE A

Closure Cost Estimates

Test Year	Annual Implicit Price Deflator*	Inflation Factor	Adjusted Closure Cost Estimate
1981	188.14 (1st quarter)	1.000	\$7,300
1982	201.88 (1st quarter)	1.073	\$7,833
1983	215.34	1.067	\$8,355
1984	223.44	1.038	\$8,670

*/ Survey of Current Business.

SECTION XIII

POST-CLOSURE PLAN

Because none of the facilities are hazardous waste disposal facilities, they are not regulated by the post-closure requirements. 40 C.F.R. § 264.110(b).

SECTION XIV

NOTICE IN DEED TO PROPERTY

There is no requirement for any deed notation as no RCRA hazardous waste has been disposed at the refinery.
40 C.F.R., § 264.120.

SECTION XV

DOCUMENTATION OF INSURANCE

Liability coverage is maintained for sudden accidental occurrences at the refinery in the amount of at least \$1,000,000 per occurrence, with an annual aggregate of at least \$2,000,000, exclusive of legal defense costs. A signed duplicate original of the endorsement of insurance to the Regional Administrator is attached as Appendix G.

SECTION XVI

SITE INFORMATION

- A. Topography
- B. Regional Geology

A. Topography

The natural ground surface in the vicinity of the project site is relatively flat. General site drainage is toward the south, east and west. Oil Creek is located just east of the refinery and runs in a south southeasterly direction. Little Eagle Creek commences just south of the refinery and flows in a southerly direction. The White River is located approximately 6 miles southeast of the project site.

Surface water flow from within the limits of the refinery (particularly within the tank farm area) is controlled by man-made facilities such as earthen dikes, roads, drainage conduits, and ditches and valves. The surface water drainage is channeled toward Oil Creek on the east side of the plant and some of the runoff is directed to a ditch on the west side of the refinery, which then flows south to Little Eagle Creek.

The individual tank bottoms contain drains located at or near the lowest point of elevation within the tank bottom. The drains have direct access (by means of individual valves) to piping which passes through the earth dikes and eventually outfall into a drainage ditch.

B. Regional Geology

The City of Indianapolis is located within the State Physiographic Division known as the Tipton Till Plain. This unit is typified by a nearly flat to gently rolling terrain which is dissected by generally southwest trending valleys. The surface topography of the Tipton Till Plain is primarily a result of the last continental glaciation (Wisconsin Age).

The unconsolidated deposits in the vicinity of the project site consist primarily of glacial till materials and extend to approximately 170 ft. depth. The glacial till is characterized by predominantly fine-grained deposits (silt and clay) intermixed with sand and gravel.

The surficial soils at the site (as mapped in the U.S. Department of Agriculture Soil Conservation Service Soil Survey for Marion County) are classified as belonging to the Brookston and Crosby Soil Series. These soils are both characterized as being of low permeability.

A map illustrating the surficial geology of Marion County is contained within U.S. Geological Survey Open-File Report 75-312 ("Availability of Ground Water in Marion County, Indiana") and is reproduced in Appendix H. The location of

the project site is also shown in Appendix H. Shale bedrock is present immediately below the glacial till materials.

As indicated in Appendix H, outwash sand and gravel deposits are associated with the major streams. The glacial outwash deposits constitute the principal aquifer in the region. In addition, the Geological Survey Report indicates that three relatively thin, discontinuous sand and gravel aquifers have been identified in the upland till-plain area. These aquifers (hereafter referred to as the upper, middle and lower confined aquifers) vary in thickness and are generally separated by predominantly silt and clay materials which act as semipervious confining beds.

Appendices I, J and K (reproduced from the Geological Survey Report) show the areal distribution, approximate elevation of the top, and points of known thickness of the upper, middle and lower confined aquifers, respectively. As shown in Appendix I, the upper confined aquifer apparently does not exist in the general vicinity of the project site. Furthermore, the site lies outside those limits indicated for the middle and lower confined aquifers as well (see Appendices J and K). However, the refinery is located sufficiently close to the middle and lower aquifer boundaries such that their presence must be considered. According to Appendix J, the top of the middle confined aquifer in the

general vicinity of the refinery is at or about El 780 or approximately 100 ft. below the existing ground surface within the project area (El 880 to El 890).

The general pattern of ground water flow with respect to the various aquifers is shown in Appendix L (reproduced from the Geological Survey Report). The cross-section represents generalized conditions approximately perpendicular to the White River.

Several existing industrial and residential water wells are located around the project site. Copies of the well records (on file with the Indiana Department of Natural Resources - Groundwater Division) for those wells drilled within a 4000 ft. radius of the refinery are contained in Appendix M. The individual water well records (for purposes of this study) are referenced by an index number in the upper right hand corner of the well record. The locations of the wells are identified by the index numbers on the Water Well Location Map in Appendix M.

Maps relating to, among other things, the topography of the refinery, surrounding land uses, legal boundaries, the prevailing wind directions at the refinery and drainage at the refinery are presented in Appendix N. See also maps attached to the original Part A application (Section I).

APPENDIX A

CHEMICAL AND PHYSICAL ANALYSES FOR
SOLID AND HAZARDOUS WASTES
STORED OR TREATED AT THE REFINERY

EMS Laboratory

EMS Laboratories, Inc., Two Environmental Plaza, 7901 West Morris Street, Indianapolis, Indiana 46231, has performed the sampling and testing of the wastes. Generally, samples are placed in two-liter wide-mouth borosilicate glass containers that are fitted with tight, screw type lids. The nature of the materials analyzed do not require sample preservation or alternation subsequent to sampling. Sample Extraction and Separate Procedures were observed as outlined in 40 C.F.R., Part 261, Appendices II and III. All analytical methods used by the EMS Laboratories are EPA approved for RCRA hazardous waste determinations. The names and model numbers of the instruments used in performing the tests are as follows: Fisher Accumet Expanded Scale Research pH meter, Model 320; Six Paddle Stirrer, Model 300, 110v 60HZ, Phipps & Bird, Inc., Richmond, A 23228, modified to comply with EP toxicity requirements; Ohaus, Triple Beam Balance, 2610 capacity; Technicon Auto Analyzer System II; Technicon Sampler IV; S.C. Colorimeter; Mainfold; Pump; Pen Recorder; Perkin-Elmer, 360, Atomic Absorption Spectrophotometer; Perkin-Elmer HGA-2100 Controller; Fisher Recordall Series 500 Single Pen Recorder; and Perkin-Elmer, 370, Atomic Absorption Spectrophotometer, Mercury Analysis System.

The names and qualifications of the persons sampling and testing are as follows:

SAMPLING:

Clarence L. Tharpe	18 years Environmental Health Experience
--------------------	--

TESTING:

C. Steven Gohmann	Laboratory Director BA Chemistry, Indiana University 8 Years Analytical Experience
Gary A. Klingler	Chief Chemist BS Chemistry, Marion College 6 Years Analytical Experience
Carl A. Mueller	Biologist BS Biology, Purdue University 2 Years Analytical Experience
Charles A. Schneider	Laboratory Technician BS Biology, Indiana University 1 Year Analytical Experience
Tyler P. Jones	Technician Assistant Two years of College (University of Kansas) 1 Year Analytical Experience
Karen K. Riley	Technician Assistant High School Diploma 1 Year Analytical Experience

EMS Laboratories Company

7901 Morris Street
P.O. 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE December 31, 1980 DATE RECEIVED December 9, 1980

EMS SAMPLE # 19

P.O. # 38953-1280 SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES

Rock Island Refining Corporation
PO Box 68007
Indianapolis, Indiana 46268

SAMPLE DESCRIPTION DRINKING WATER

WASTE WATER

BILL TO:

Attn: Bill Laque

Leachate OTHER EP Toxicity

COLLECTED BY DATE SAMPLED

No. 6741

PARAMETER	RESULTS		DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
<u>REACTIVITY ASSESSMENT</u>						
Cyanide	17.1	µg/gr	12-15	C. Schneider	Distillation + barbituric acid colorimetric	\$ 50.00
Sulfide	Not detectable in Lead Acetate					
<u>CORROSIVITY</u>						
pH	8.6		12-15	C. Mueller	Electrode method	3.50
Steel Corrosion	< 0.01	mm/yr	12-23	C. Schneider	NACE	100.00
<u>IGNITABILITY</u>						
Flash Point	SOLID SAMPLE/NOT APPLICABLE					
<u>EP TOXICITY</u>						
Cadmium	< 0.01	mg/l	12-22	T. Jones	Atomic absorption	250.00
Chromium	0.20	mg/l	12-22			
Lead	1.3	mg/l				
Silver	0.03	mg/l				
Mercury	< 0.0005	mg/l	12-29	T. Jones	Flameless A A	
Arsenic	< 0.05	mg/l	12-23	G. Klingler		
Selenium	< 0.05	mg/l				
Barium	3.4	mg/l	12-22	T. Jones	Atomic absorption	

DO NOT PAY FROM THIS COPY

Leachate Prep charge

REMARKS:

*This analysis pertains
to material from the Vacuum Filter*

DATA REVIEWED BY: *Gary A. Klingler*

GARY KLINGLER
REPORT COPY

\$403.50

DO NOT PAY FROM THIS COPY

MC Laboratories Company

11 Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE March 20, 1981 DATE RECEIVED March 2, 1981

EMS SAMPLE # 20625

P.O. # A 3496-281 SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES Rock Island Refining Corporation DESCRIPTION DRINKING WATER
PO Box 68007
Indianapolis, Indiana 46268 WASTE WATER
Attn: Bill Laque Leachate OTHER

BILL TO:

COLLECTED BY _____ DATE SAMPLED _____

No. 729

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
pH	9.0	3-4	C. Schneider	Electrode method	\$ 3.50
Total Solids	39.9 %	3-6	P. Burton	Gravimetric	12.00
Cadmium	< 0.01 mg/l	3-7	T. Jones	Atomic absorption	250.00
Chromium	0.55 mg/l				
Lead	< 0.1 mg/l				
Silver	0.02				
Mercury	< 0.0005 mg/l	3-18	C. Schneider	Flameless A A	
Arsenic	< 0.01 mg/l				
Selenium	< 0.01 mg/l				
Chromium VI	< .01 mg/l	3-12	C. Burton	Colorimetric	12.00
Barium	5.2 mg/l	3-9	T. Jones	Atomic absorption	
Cyanide	14.8 µg/gr	3-5	C. Schneider	Distillation + barbituric acid colorimetric	
Sulfide	200 µg/gr	3-7	C. Schneider	Titrimetric - iodine	
Total Lead - as received	< 9.8 µg/gr	3-11	T. Jones	Atomic absorption	10.00
Total Chromium - as received	3062 µg/gr	3-11	T. Jones	Atomic absorption	10.00
Sample Prep					14.00

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

\$ 311.50

C. STEVEN GOHMANN
REPORT COPY

EMC Laboratories Company

7901 Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE Apr 17, 1981 DATE RECEIVED March 25, 1981

EMS SAMPLE # 21090 A & B

P.O. # A 3496-281 SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES Rock Island Refining Corporation SAMPLE DESCRIPTION DRINKING WATER
PO Box 68007 WASTE WATER
Indianapolis, Indiana 46268
Attn: Bill Laque Leachate OTHER _____

BILL TO:

COLLECTED BY _____ DATE SAMPLED _____

No. 2499

AMENDED LAB REPORT

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#21090 A - EP Toxicity					
pH	7.8	4-6	C. Mueller	Electrode method	
Total Solids	6.5 %	4-9	P. Burton	Gravimetric	
Cadmium	< .01 mg/l	4-8	C. Schneider	Atomic absorption	
Chromium	0.34 mg/l				
Lead	0.4 mg/l				
Silver	0.01 mg/l				
Mercury	< .0005 mg/l	4-9	C. Schneider	Flameless A A	
Arsenic	< 0.02 mg/l				
Selenium	< 0.02 mg/l				
Barium	3.1 mg/l	4-8	C. Schneider	Atomic absorption	
Chromium	< .01 mg/l	4-8	K. Riley	Colorimetric	
Cyanide	29.8 µg/gr	3-31	G. Klingler	Distillation + barbituric acid colorimetric	
Sulfide	NOT DETECTABLE USING LEAD ACETATE				
#21090 B - Total Analysis					
Chromium	165 µg/gr	3-26	C. Schneider	Atomic absorption	
Lead	74 µg/gr	3-26	C. Schneider	Atomic absorption	
Sample Prep and Sludge Charge					

DO NOT PAY FROM THIS COPY

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

C. STEVEN GOHMANN
REPORT COPY

FMS Laboratories Company

11 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE April 17, 1981 DATE RECEIVED March 25, 1981

EMS SAMPLE # 21090 A & B

P.O. # A 3496-281

SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES Rock Island Refining Corporation SAMPLE DESCRIPTION DRINKING WATER
PO Box 68007
Indianapolis, Indiana 46268 WASTE WATER

BILL TO: Attn: Bill Laque

Leachate

OTHER

COLLECTED BY _____ DATE SAMPLED _____

No. 2105

PARAMETER	RESULTS		DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#21090 A - EP Toxicity						
pH	7.8		4-6	C. Mueller	Electrode method	\$ 3.50
Total Solids	65,004	mg/l	4-9	P. Burton	Gravimetric	12.00
Cadmium	< .01	mg/l	4-8	C. Schneider	Atomic absorption	250.00
Chromium	0.34	mg/l				
Lead	0.4	mg/l				
Silver	0.01	mg/l				
Mercury	< .0005	mg/l	4-9	C. Schneider	Flameless A A	
Arsenic	< 0.02	mg/l				
Selenium	< 0.02	mg/l				
Barium	3.1	mg/l	4-8	C. Schneider	Atomic absorption	
Chromium VI	< .01	mg/l	4-8	K. Riley	Colorimetric	12.00
Cyanide	29.8	ug/gr	3-31	G. Klingler	Distillation + barbituric acid colorimetric	50.00
Sulfide	NOT DETECTABLE USING LEAD ACETATE					
#21090 B - Total Analysis						
Chromium	165	ug/gr	3-26	C. Schneider	Atomic absorption	10.00
Lead	74	ug/gr	3-26	C. Schneider	Atomic absorption	10.00
Sample Prep & Sludge charge						

DO NOT PAY FROM THIS

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REMARKS:

DATA REVIEWED BY: 

C. STEVEN GOHMANN

\$376.50

EMS Laboratories Company

West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE April 27, 1981 DATE RECEIVED April 1, 1981

EMS SAMPLE # 21205 - Total Analysis

DELIVERY
TICKET

P.O. # A 3496 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES

SAMPLE DESCRIPTION DRINKING WATER

Rock Island Refining Corporation
PO Box 68007

WASTE WATER

Indianapolis, Indiana 46268

BILL TO:

Attn: Bill Laque

Leachate

OTHER

No. 2498

COLLECTED BY _____ DATE SAMPLED _____

AMENDED LAB REPORT

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
pH	8.1	4-8	C. Mueller	Electrode method	NO CHARGE
Cyanide	0.78 mg/l	4-20	T. Jones	Distillation + barbituric acid colorimetric	
Sulfide	NOT DETECTABLE WITH LEAD ACETATE				
Cyanide A	0.78 mg/l	4-20	T. Jones	Same as above	
Cadmium	< .01 mg/l	4-10	C. Schneider	Atomic absorption	
Chromium	1.18 mg/l				
Lead	< .1 mg/l				
Silver	0.01 mg/l				
Mercury	< .0005 mg/l	4-9	C. Schneider	Flameless A A	
Arsenic	0.02 mg/l				
Selenium	0.02 mg/l				
Barium	2.0 mg/l	5-10	C. Schneider	Atomic absorption	
Chromium VI	< .01 mg/l	4-9	K. Riley	Colorimetric	
* Flash Point	See Note				
<u>TOTAL ANALYSIS</u>					
Chromium	362 ug/gr	4-10	C. Schneider	Atomic absorption	
Lead	127 ug/gr				
Sample Prep					

DO NOT PAY FROM THIS COPY

* Note - Sample is not a liquid and is not capable under standard temperature and pressure of causing fire through friction, absorption of moisture or spontaneous chemical change; furthermore, when ignited, it does not burn vigorously.

REMARKS:

DATA REVIEWED BY: 

NO CHARGE

C. STEVEN GOHMANN
REPORT COPY

laboratories Company

West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE April 27, 1981 DATE RECEIVED April 1, 1981

EMS SAMPLE # 41205 - Total Analysis

P.O. # A 3496 SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES Rock Island Refining Corporation
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION DRINKING WATER
WASTE WATER
Leachate OTHER

BILL TO:

COLLECTED BY _____ DATE SAMPLED _____

No. 2216

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
pH	8.1	4-8	C. Mueller	Electrode method	\$ 3.50
Cyanide	0.78 mg/l	4-20	T. Jones	Distillation + barbituric acid colorimetric	50.00
Sulfide	NOT DETECTABLE WITH LEAD ACETATE				
Cyanide A	0.78 mg/l	4-20	T. Jones	Same as above	22.00
Cadmium	< .01 mg/l	4-10	C. Schneider	Atomic absorption	250.00
Chromium	1.18 mg/l				
Lead	< .1				
Silver	0.01 mg/l				
Mercury	< .0005 mg/l	4-9	C. Schneider	Flameless A A	
Arsenic	0.02 mg/l				
Selenium	0.02 mg/l				
Barium	2.0 mg/l				
Chromium VI	< .01 mg/l	4-9	K. Riley	Colorimetric	12.00
Flash Point	130° F	4-7	P. Burton	Penske Martin Closed Cup	25.00
Flash Point after 24 Hrs Open	135° F	4-20	P. Burton	Penske Martin Closed Cup	25.00
<u>TOTAL ANALYSIS</u>					
Chromium	362 µg/gr	4-10	C. Schneider	Atomic absorption	10.00
Lead	127 µg/gr				10.00
Sample Prep					29.00

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY:

C. STEVEN GOHMANN

\$ 436.00

IS Laboratories Company

West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE April 30, 1981 DATE RECEIVED April 10, 1981

EMS SAMPLE # 21393 A & B

DELIVERY
TICKET

P.O. # A 3496 - 281 SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES Rock Island Refining Corporation SAMPLE DESCRIPTION DRINKING WATER
PO Box 68007 WASTE WATER
Indianapolis, Indiana 46268

BILL TO: Attn: Bill Laque

Leachate OTHER

No. 2264

COLLECTED BY _____ DATE SAMPLED _____

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#21393 - A EP Toxicity					
pH	9.7	4-13	C. Mueller	Electrode method	\$ 348.50
Total Solids	591,899 $\mu\text{g}/\text{gr}$	4-17	P. Burton	Gravimetric	
Cadmium	< .01 mg/l	4-14	C. Schneider	Atomic absorption	
Chromium	1.15 mg/l				
Lead	< .1 mg/l				
Silver	.02 mg/l				
Mercury	< .0005 mg/l	4-17	C. Schneider	Flameless A A	
Arsenic	< .05 mg/l				
Selenium	< .05 mg/l				
Barium	2.4 mg/l	4-14	C. Schneider	Atomic absorption	
Chromium VI	< .01 mg/l	4-16	J. Murray	Colorimetric	
Cyanide	13.2 $\mu\text{g}/\text{gr}$	4-22	T. Jones	Distillation + barbituric acid colorimetric	
Sulfide	NOT DETECTABLE USING LEAD ACETATE				
Cyanide on DI ext. then Dist.	0.85 $\mu\text{g}/\text{gr}$	4-24	T. Jones	Distillation + barbituric acid colorimetric	
#21393 - B Total Analysis					
Chromium	1383 $\mu\text{g}/\text{gr}$	4-14	C. Schneider	Atomic absorption	49.00
Lead	362 $\mu\text{g}/\text{gr}$				
Sample Prep					

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

\$397.50

C. STEVEN GOHMANN
REPORT COPY

EM Laboratories Company

7901 Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE April 30, 1981 DATE RECEIVED April 10, 1981EMS SAMPLE # 21393 A & BP.O. # A 3496 - 281 SAMPLE TYPE GRAB COMPOSITEDELIVERY
TICKET

SAMPLE SOURCES

SAMPLE DESCRIPTION Rock Island Refining Corporation DRINKING WATER

PO Box 68007

Indianapolis, Indiana 46268

WASTE WATER

BILL TO:

Attn: Bill Laque

leachateOTHER

No. 2500

COLLECTED BY _____ DATE SAMPLED _____

AMENDED LAB REPORT

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#21393 - A - EP Toxicity					
pH	9.7	4-13	C. Mueller	Electrode method	NO CHARGE
Total Solids	59 %	4-17	P. Burton	Gravimetric	
Cadmium	< .01 mg/l	4-14	C. Schneider	Atomic absorption	
Chromium	1.15 mg/l				
Lead	< .1 mg/l				
Silver	.02 mg/l				
Mercury	< .0005 mg/l	4-17	C. Schneider	Flameless A A	
Arsenic	< .05 mg/l				
Selenium	< .05 mg/l				
Barium	2.4 mg/l	4-14	C. Schneider	Atomic absorption	
Chromium VI	< .01 mg/l	4-16	J. Murray	Colorimetric	
Cyanide	13.2 µg/gr	4-22	T. Jones	Distillation + barbituric acid colorimetric	
Sulfide	NOT DETECTABLE USING LEAD ACETATE				
Cyanide on DI ext. then Dist.	0.85 µg/gr	4-24	T. Jones	Distillation + barbituric acid colorimetric	
#21393 - B Total Analysis					
Chromium	1383 µg/gr	4-14	C. Schneider	Atomic absorption	
Lead	362 µg/gr				
Sample Prep					

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

NO Charge

C. STEVEN GOHMANN

REPORT COPY

MS Laboratories Company

1 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE May 18, 1981 DATE RECEIVED May 13, 1981

EMS SAMPLE # 21929

P.O. # A 3496-281 SAMPLE TYPE GRAB COMPOSITE

**DELIVERY
TICKET**

SAMPLE SOURCES

Rock Island
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION DRINKING WATER

WASTE WATER

OTHER

BILL TO:

COLLECTED BY DATE SAMPLED

No. 2501

AMENDED LAB REPORT

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
-----------	---------	---------------	---------	--------------------	--------

* Flash Point	See Note				
---------------	----------	--	--	--	--

* Note - Sample is not a liquid and is not capable under standard temperature and pressure of causing fire through friction, absorption of moisture or spontaneous chemical change; furthermore, when ignited, it does not burn vigorously.

NO CHARGE

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

NO CHARGE

C. STEVEN GOHMANN

IS Laboratories Company

1501 West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE 18, 1981 DATE RECEIVED May 13, 1981

EMS SAMPLE # 21929

P.O. # _____ SAMPLE TYPE GRAB COMPOSITE

DELIVERY
TICKET

SAMPLE SOURCES
Rock Island
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION _____ DRINKING WATER

WASTE WATER

BILL TO:

Solid OTHER _____

COLLECTED BY _____ DATE SAMPLED _____

No. 2361

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
Flash Point	120° F	5-14	P. Burton	Penske Martin Closed Cup	\$ 25.00

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY: 

\$ 25.00

FMS Laboratories Company

West Morris Street
P.O. Box 41371
Indianapolis, Indiana 46241
(317) 243-8304

REPORT DATE July 29, 1981 DATE RECEIVED July 27, 1981

EMS SAMPLE # 23043

**DELIVERY
TICKET**

P.O. # _____ SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES Rock Island Refining
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

SAMPLE DESCRIPTION _____ DRINKING WATER

_____ WASTE WATER

_____ Sludge

_____ OTHER _____

BILL TO:

COLLECTED BY _____ DATE SAMPLED _____

No. 3391

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
<u>Vacuum Filter Sludge</u>					
Cyanide Total	3.2	µg/gr	7-29	C. Schneider	Distillation + barbituric acid colorimetric
Cyanide Total - Water extract	0.4	µg/gr			NO CHARGE
Cyanide A	0.3	µg/gr			

DO NOT PAY FROM THIS COPY

REMARKS:

DATA REVIEWED BY:

GARY KLINGLER

REPORT COPY

EMS Laboratories, Inc.

Two Environmental Plaza
7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-8304
EPA Certification # IN021

REPORT DATE February 26, 1982 DATE RECEIVED February 11, 1982

EMS SAMPLE # 26178 A & B

REPORT
NUMBER

P.O. # SAMPLE TYPE GRAB COMPOSITE

SAMPLE SOURCES Rock Island Refining
PO Box 68007
Indianapolis, Indiana 46268
Attn: Bill Laque

WASTEWATER

DATE SAMPLED

SLUDGE

COLLECTED BY

BILL TO:

OIL

REMARKS

LEACHATE

OTHER

ND=Not detected at level indicated

No.1237

Do not pay from
this copy

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
-----------	---------	---------------	---------	--------------------	--------

EP TOXICITY

Chromium VI	ND @ .01 mg/l	2-16	M. Branam	Colorimetric	\$ 164.00
Chromium	0.29 mg/l	2-17	A. Lee	Atomic absorption	
Lead	0.2 mg/l	2-17	A. Lee	Atomic absorption	

TOTAL ANALYSIS

pH	8.8	2-11	M. Smith	Electrode method	64.50
Total Solids	54.6 %	2-12	K. Riley	Gravimetric	
Chromium	1338 ug/gr	2-22	A. Lee	Atomic absorption	
Lead	48.7 ug/gr	2-22	A. Lee		
Chromium (Dry)	2450 ug/gr				
Lead (Dry)	89 ug/gr				

Sample Prep

\$228.50

4 Hours - Consultation - @ \$45.00 = \$180.00

180.00

DATA REVIEWED BY:

\$408.50

REPORT COPY

SPECIAL WASTE ANALYSIS REPORT

LABORATORY: Chemical Waste Management

ROCK ISLAND REFINING CORP
INIANAPOLIS, IN
SOURCE: SAL SITE: CID
VACUUM FILTER CAKE

PROFILE SHEET RECEIVED ON: 4/29/83 REPRESENTATIVE SAMPLE RECEIVED ON: 4/29/83

CERTIFICATE OF REP. SAMPLE RECEIVED: 4/29/83 SAMPLE TAKEN: 6/30/82

PROPOSED TREATMENT/DISPOSAL FACILITY: NON-WME

THE ANALYSES BELOW REPORTED WERE SELECTED BY ME, BASED UPON THE GENERATOR'S REPRESENTATIONS IN THE PROFILE SHEET AND ANY APPLICABLE WASTE ANALYSIS PLAN ESTABLISHED BY THE PROPOSED FACILITY FOR WASTE OF THIS TYPE. ANALYSES REQUIRED BY A WASTE ANALYSIS PLAN ARE INDICATED BY AN ASTERISK (*).

DATE OF ANALYSIS: 6-7-83 LAB MANAGER: Rich A. Stemple

Test	As Received	Leachate	EP TOX	Test	As Received	Leachate	Analyst Initials
Specific Gravity							
pH <u>10% SOLUTION</u>	<u>8.4</u>						
Acidity, % as							
Alkalinity, % as				Phenols, mg/l	<u><10.0</u>		
C O D, mg/l				Cyanides, as CN, Total, mg/l	<u><10.0</u>		
B O D, mg/l				Cyanides, as CN, Free, mg/l			
Total Solids @ 105°C	<u>74.16%</u>			Nitrogen, Ammonia, as N, mg/l			
Total Dissolved Solids, mg/l				Nitrogen, Organic, as N, mg/l			
Total Suspended Solids, mg/l				Total Kjeldahl Nitrogen, as N, mg/l			
Residue on Evaporation @ 180°C							
Flash Point, F°	<u>>212</u>			Total Alkalinity (P), as CaCO ₃ , mg/l			
Ash Content, on Ignition	<u>50.00%</u>			Total Alkalinity (M), as CaCO ₃ , mg/l			
Heating Value, BTU/lb				Total Hardness, as CaCO ₃ , mg/l			
"Acid Scrub," gNaOH/g				Calcium Hardness, as CaCO ₃ , mg/l			
				Magnesium Hardness, as CaCO ₃ , mg/l			
Arsenic, as AS, mg/l	<u><0.10</u>						
Barium, as Ba, mg/l	<u>262.</u>		<u>2.37</u>	Oil and Grease, mg/l			
Boron, as BI, mg/l							
Cadmium, as Cd, mg/l	<u>2.75</u>		<u>0.02</u>				
Chromium, Total as Cr, mg/l	<u>626.</u>		<u>0.26</u>				
Hexavalent Chromium @ Cr, mg/l				Aldrin, mg/l			
Copper, as Cu, mg/l	<u>171.</u>		<u><0.01</u>	Chlordane, mg/l			
Iron, Total as Fe, mg/l				DDT's, mg/l			
Iron, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l	<u>227.</u>		<u>0.28</u>	Endrin, mg/l			
Manganese, as Mn, mg/l				Heptachlor, mg/l			
Magnesium, as Mg, mg/l				Lindane, mg/l			
Mercury, as Hg, mg/l	<u>3.03</u>		<u><0.001</u>	Methoxychlor, mg/l			
Nickel, as Ni, mg/l	<u>45.4</u>		<u>0.23</u>	Toxaphene, mg/l			
Selenium, as Se, mg/l	<u><0.10</u>			Parathion, mg/l			
Silver, as Ag, mg/l	<u>1.53</u>			2, 4, D, mg/l			
Zinc, as Zn, mg/l	<u>760.</u>		<u>4.02</u>	2, 4, 5, TP (Silvex), mg/l			
				PCB's, mg/l	<u><5.0</u>		
Bicarbonates, as HCO ₃ , mg/l							
Carbonates, as CO ₃ , mg/l							
Chlorides, as Cl, mg/l							
Fluorides, as F, mg/l							
Nitrate, as NO ₃ , mg/l							
Nitrite, as NO ₂ , mg/l							
Phosphate, as P, mg/l							
Sulfate, as SO ₄ , mg/l							
Sulfides, as S, mg/l	<u>dissolved <2.0</u>						

EMS Laboratories, Inc. Addendum B

Environmental Plaza
West Morris Street
Indianapolis, Indiana 46231 (317) 243-8304
Certification # IN02

REPORT DATE July 9, 1984

DATE RECEIVED March 29, 1984

EMS SAMPLE # 37837

P.O. # 52162

REPORT
NUMBER

SAMPLE TYPE GRAB COMPOSITE

DATE SAMPLED

COLLECTED BY

REMARKS

No. 8817

Do not pay from
this copy

SAMPLE SOURCES Rock Island Refining Corp.
5000 W. 86th St.
Indianapolis, Indiana 46268
Attn: Bill Laque

WASTEWATER

SLUDGE

OIL

LEACHATE

OTHER

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#37837 - Vacuum Filter Cake					
EP TOXICITY - per Attachment D					
Chromium	0.66	MMC* 4-19	M. Branam	Atomic absorption	Billed
Cadmium	≤ 0.02	0.29 mg/l	M. Branam	Atomic absorption	
Lead	≤ 0.1	0.03 mg/l	M. Branam	Atomic absorption	
Silver	≤ 0.1	0.22 mg/l	M. Branam	Atomic absorption	
Barium	1.7	0.01 mg/l	M. Branam	Atomic absorption	
Mercury	0.01	0.01 mg/l	M. Branam	Atomic absorption	
Arsenic	≤ 0.1	≤ 0.005 mg/l	M. Branam	Atomic absorption	
Selenium	≤ 0.1	0.006 mg/l	M. Branam	Flameless A A	
		0.012 mg/l	M. Branam	Flameless A A	
			M. Branam	Flameless A A	
Chromium VI	≤ 0.01	NR mg/l	C. Schneider	Colorimetric	
Antimony	≤ 0.5	0.05 mg/l	C. Schneider	ICP	
Beryllium	≤ 0.01	0.01 mg/l	C. Schneider	ICP	
Cobalt	≤ 0.01	0.38 mg/l	C. Schneider	ICP	
Vanadium	≤ 0.1	0.13 mg/l	C. Schneider	ICP	
Nickel	0.29	0.11 mg/l	C. Schneider	ICP	
			C. Schneider	ICP	
CORROSIVITY - pH	9.2	4-16	K. Shadley	Electrode method	

*Mobile Metal Concentration - per Attachment D

NR - Cannot analyze CrVI on the solvent-insoluble portion (N.M.A.)

REVIEWED BY

[Signature]

REPORT

EMS Laboratories, Inc.

100 Environmental Plaza
201 West Morris Street
Indianapolis, Indiana 46201 (317) 243-8304
EPA Certification # IN021

REPORT DATE July 9, 1984

DATE RECEIVED March 29, 1984

EMS SAMPLE # 37837

P.O. # 52162

SAMPLE TYPE GRAB COMPOSITE

REPORT
NUMBER

SAMPLE SOURCES Rock Island Refining Corp.
5000 W. 86th St.
Indianapolis, Indiana 46268
Attn: Bill Laque

WASTEWATER

DATE SAMPLED

SLUDGE

COLLECTED BY

OIL

REMARKS

LEACHATE

OTHER

DRAFT

No. 8919

Do not pay from
this copy

PARAMETER	RESULTS	DATE ANALYZED	ANALYST	METHOD OF ANALYSIS	CHARGE
#37837 - Vacuum Filter Cake - Analyzed "As Received" per 40 CFR 261.24					
Cadmium	1	ug/gr 4-4	M. Branam	Atomic absorption	Billed
Nickel	69	ug/gr 4-4	M. Branam	Atomic absorption	
Chromium	405	ug/gr 4-4	M. Branam	Atomic absorption	
Lead	47	ug/gr 4-4	M. Branam	Atomic absorption	
Antimony	39	ug/gr 4-4	M. Branam	Atomic absorption	
Beryllium	0.2	ug/gr 4-4	M. Branam	Atomic absorption	
Barium	26	ug/gr 4-4	M. Branam	Atomic absorption	
Mercury	≤ 0.01	ug/gr 4-4	M. Branam	Atomic absorption	
Arsenic	0.26	ug/gr 4-4	M. Branam	Atomic absorption	
Selenium	≤ 2.5	ug/gr 4-4	M. Branam	Atomic absorption	
Cobalt	8	ug/gr 4-4	M. Branam	Atomic absorption	
Vanadium	≤ 4	ug/gr 4-4	M. Branam	Atomic absorption	
Silver	≤ 0.25	ug/gr 4-4	M. Branam	Atomic absorption	
Total Solids	64 %	5-13	M. Branam	Atomic absorption	
Chromium VI	≤ 12	ug/gr 6-25	M. Bidwell	Gravimetric	
Oil & Grease	14 %	5-14	C. Gatton	Alkaline Digestion	
TOC	1340	ug/gr 7-10	H. Stockrahm	Liquid extraction	
			HL	Pyrolysis/microcoulometer titration	

Solid Residue After Step 9 80 % of original mass

Volatiles & Semi-Volatiles See attached data

REVIEWED BY

Gary A. Klingler

APPROVED

July 9, 1984

Rock Island Refining Corporation
5000 W. 86th St.
Indianapolis, Indiana 46268

Date Sampled: 1-29-84 Vacuum Filter Cake

EMS Sample #: 37837

TABLE I

VOLATILE ORGANIC PRIORITY POLLUTANTS

<u>EPA NO.</u>	<u>COMPOUND</u>	<u>RESULTS (ppm)</u>
2*	acrolein	ND
3*	acrylonitrile	ND
4	benzene	11
6	carbon tetrachloride	ND
7	chlorobenzene	ND
10	1,2-dichloroethane	ND
11	1,1,1-trichloroethane	ND
13	1,1-dichloroethane	ND
14	1,1,2-trichloroethane	ND
15	1,1,2,2-tetrachloroethane	ND
16	chloroethane	ND
19	2-chloroethylvinyl ether	ND
23	chloroform	ND
29	1,1-dichloroethylene	ND
30	trans-1,2-dichloroethylene	ND
32	1,2-dichloropropane	ND
33	trans-1,3-dichloropropene	ND
33	cis-1,3-dichloropropene	ND
38	ethylbenzene	75
44	methylene chloride	ND
45	chloromethane	ND
46	bromomethane	ND
47	bromoform	ND
48	bromodichloromethane	ND
49	trichlorofluoromethane	ND
50	dichlorodifluoromethane	ND
51	dibromochloromethane	ND
85	tetrachloroethylene	ND
86	toluene	110
87	trichloroethylene	ND
88	vinyl chloride	ND

NQ=Present below quantification limit.

Detection Limit (ppm): .002

*Detection Limit (ppm): .02

Surrogate Recoveries (%)

1,2 Dichloroethane-d4	105
Toluene-d8	53
Bromofluorobenzene	18

EMS

July 9, 1984

Table I - Continued

Rock Island Refining Corp.

EMS Sample #: 37837

Sample ID: 3-29-84 Vacuum Filter Cake

SEMI-VOLATILE ORGANICS

<u>EPA NO.</u>	<u>COMPOUND</u>	<u>RESULTS (ppm)</u>
21*	2,4,6-trichlorophenol	ND
22*	p-chloro-m-cresol	ND
24*	2-chlorophenol	ND
31*	2,4-dichlorophenol	ND
34*	2,4-dimethylphenol	ND
57*	2-nitrophenol	ND
58*	4-nitrophenol	ND
59**	2,4-dinitrophenol	ND
60**	4,6-dinitro-o-cresol	ND
64*	pentachlorophenol	ND
65*	phenol	ND
1	acenaphthene	ND
5	benzidine	ND
8	1,2,4-trichlorobenzene	ND
9	hexachlorobenzene	ND
12	hexachloroethane	ND
17	bis(chloromethyl)ether	ND
18	bis(2-chloroethyl)ether	ND
20	2-chloronaphthalene	ND
25	1,2-dichlorobenzene	ND
26	1,3-dichlorobenzene	ND
27	1,4-dichlorobenzene	ND
28	3,3'-dichlorobenzidine	ND
35	2,4-dinitrotoluene	ND
36	2,6-dinitrotoluene	ND
37	1,2-diphenylhydrazine	ND
39	fluoranthene	ND
40	4-chlorophenyl phenyl ether	0.38
41	4-bromophenyl phenyl ether	ND
42	bis(2-chloroisopropyl)ether	ND
43	bis(2-chloroethoxy)methane	ND
52	hexachlorobutadiene	ND
53	hexachlorocyclopentadiene	ND
54	isophorone	ND
55	naphthalene	ND
56	nitrobenzene	1.7
		ND

EMS

July 9, 1984

Table I - Continued
Rock Island Refining Corp.

EMS Sample #: 37837

Sample ID: 3-29-84 Vacuum Filter Cake

SEMIVOLATILE ORGANICS - Continued

<u>EPA NO.</u>	<u>COMPOUND</u>	<u>RESULTS (ppm)</u>
61	N-nitrosodimethylamine	
62	N-nitrosodiphenylamine	ND
63	N-nitrosodi-n-propylamine	ND
66	bis(2-ethylhexyl)phthalate	ND
67	butyl benzyl phthalate	ND
68	di-n-butyl phthalate	ND
69	di-n-octyl phthalate	ND
70	diethyl phthalate	ND
71	dimethyl phthalate	ND
72	benz(a)anthracene	ND
73	benzo(a)pyrene	NQ
74	3,4-benzofluoranthene	NQ
75	benzo(k)fluoranthene	ND
76	chrysene	ND
77	acenaphthylene	0.12
78	anthracene	ND
79*	benzo(g,h,i)perylene	0.070
80	fluorene	ND
81	phenanthrene	0.13
82*	dibenzo(a,h)anthracene	0.87
83*	indeno(1,2,3-cd)pyrene	ND
84	pyrene	ND
		0.08

NQ=Present below quantification limit.

Detection Limit (ppm): .05

*Detection Limit (ppm): .125

**Detection Limit (ppm): 1.25

Surrogate Recoveries (%)

Dichlorobenzene-d4	7
Nitrobenzene-d5	ND
Naphthalene-d8	9
Phenanthrene-d10	10
Chrysene-d12	21
Phenol-d5	ND
2-Fluorophenol	ND
2,4,6 Tribromophenol	ND
Pentafluorophenol	ND

EMS

TABLE II

	Concentration (ppm)
<u>METALS</u>	
Antimony	39
Arsenic	0.26
Barium	26
Beryllium	0.2
Cadmium	1.0
Chromium	405
Cobalt	8.0
Lead	47
Mercury	0.01
Nickel	69
Selenium	≤ 2.5
Vanadium	≤ 4.0
<u>ORGANICS</u>	
Acetonitrile	ND
Acrolein	ND
Acrylonitrile	ND
Aniline	ND
Anthracene	0.07
Benz(c)acridine	ND
Benz(a)anthracene	NQ
Benzene	11
Benzenethiol	ND
Benzidine	ND
Benzo(b)fluoranthene	ND
Benzo(j)fluoranthene	ND
Benzo(k)fluoranthene	ND
Benzo(a)pyrene	NQ
Benzyl chloride	ND
Bis(2-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(chloromethyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
Butyl benzyl phthalate	ND
Carbon Disulfide	ND
p-Chloro-m-cresol	ND
Chlorobenzene	ND
Chloroform	ND
Chloromethane	ND
2-Chloronaphthalene	ND
2-Chlorophenol	ND
Chrysene	0.12
Cresol	ND
Crotonaldehyde	ND
Dibenz(a,h)acridine	ND
Dibenz(a,j)acridine	ND
Dibenz(a,h)anthracene	ND
2H-Dibenzo(c,g)carbazole	ND

EMS

Table 11 - Continued

ORGANICS - Continued	Concentration (ppm)
7,12-Dimethylbenz(a)anthracene	ND
Dibenzo(a,e)pyrene	ND
Dibenzo(a,h)pyrene	ND
Dibenzo(a,i)pyrene	ND
Di-n-butylphthalate	ND
1,1-Dichloroethane	ND
Dichlorobenzenes	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloroethylene	ND
Dichloromethane	ND
Dichloropropane	ND
Dichloropropanol	ND
Diethyl phthalate	ND
2,4-Dimethylphenol	ND
7,12-Dimethyl Benz(a)anthracene	ND
Dimethylphthalate	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,4-Dioxane	ND
1,2-Diphenylhydrazine	ND
Ethyleneimine	ND
Ethylene Dibromide	ND
Ethylene oxide	ND
Fluoranthene	0.38
Hydrogen sulfide	ND
Hydroquinone	ND
Indene	1.0
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
2-Methyl Aziridine	ND
Methyl Benz(c)phenanthrene	ND
Methyl Mercaptan	ND
3-Methylcholanthrene	ND
Methyl Chrysene	ND
Methyl Ethyl Ketone	ND
1-Methyl Naphthalene	3.5
Naphthalene	1.7
Naphthylamine	ND
5-Nitroacenaphthene	ND
p-Nitroaniline	ND
Nitrobenzene	ND
Nitrophenol	ND
N-Nitrosodiethylamine	ND
Pentachlorophenol	ND
Phenanthrene	0.87
Phenol	ND
Pyrene	0.08
Pyridine	ND

EMS

Table II - Continued

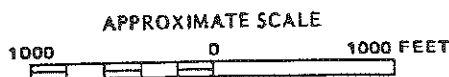
<u>ORGANICS - Continued</u>	<u>Concentration (ppm)</u>
Quinoline	ND
Styrene	ND
Tetrachloroethanes	ND
Tetrachloroethylene	ND
Toluene	110
Trichlorobenzenes	ND
Trichloroethanes	ND
Trichloroethylene	ND
Trichlorophenols	ND
Trimethyl Benz(a)anthracene	ND

EMS

APPENDIX B

FEDERAL INSURANCE ADMINISTRATION
FLOOD MAP

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.



NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

CITY OF
INDIANAPOLIS,
INDIANA
MARION COUNTY
(INCLUDES
CITY OF BEECH GROVE,
CITY OF LAWRENCE,
CITY OF SOUTHPORT AND
TOWN OF SPEEDWAY)

PANEL 10 OF 100

COMMUNITY-PANEL NUMBER
180159 0010 C

EFFECTIVE DATE:
MAY 15, 1984



Federal Emergency Management Agency

KEY TO MAP

500-Year Flood Boundary _____

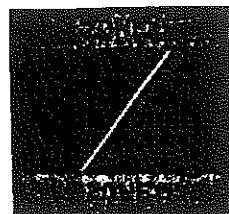
100-Year Flood Boundary _____

Zone Designations*

100-Year Flood Boundary _____

500-Year Flood Boundary _____

Base Flood Elevation Line
With Elevation In Feet**



513

Base Flood Elevation In Feet
Where Uniform Within Zone**

(EL 987)

Elevation Reference Mark

RM7x

Zone D Boundary _____

River Mile

•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Map Index.

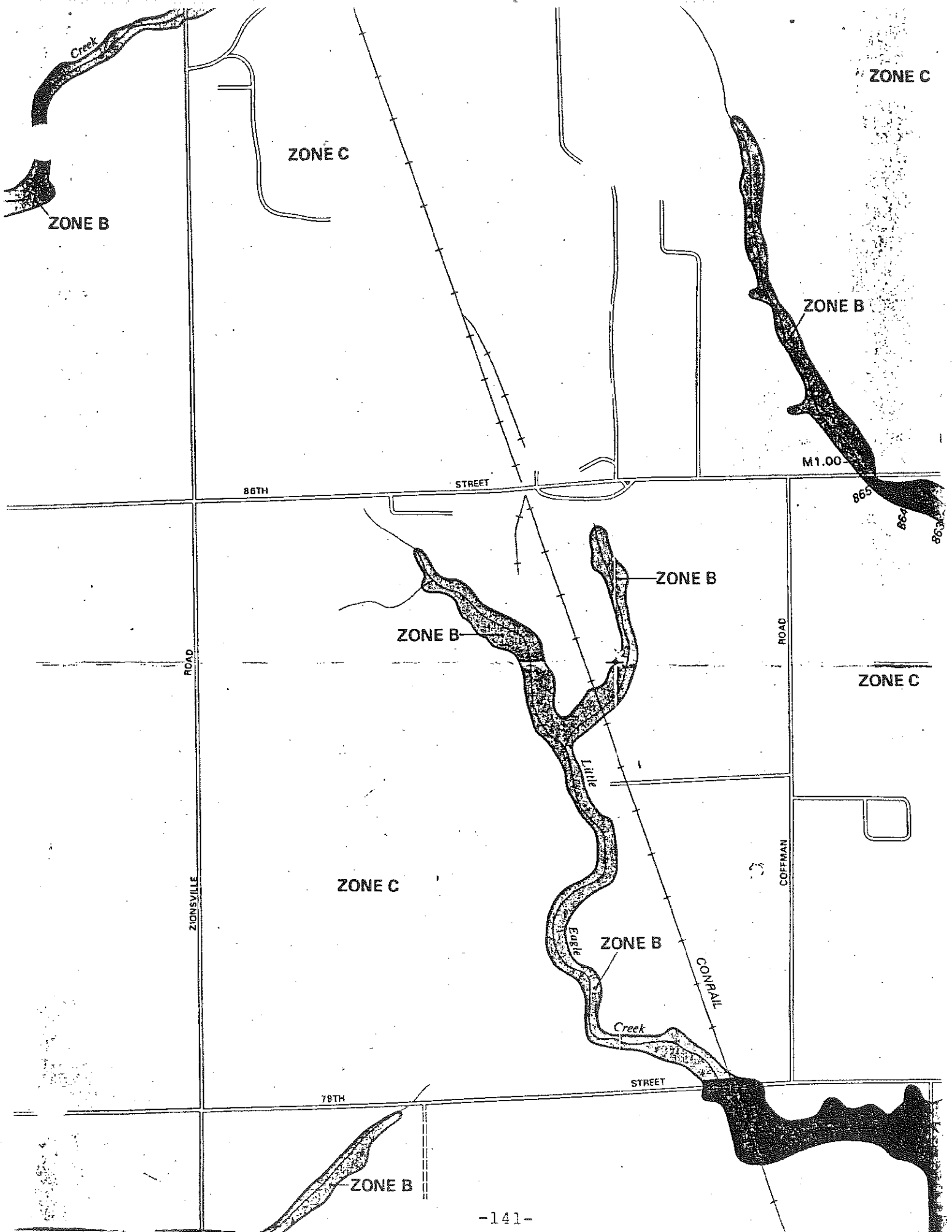
INITIAL IDENTIFICATION:

MAY 17, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:

SEPTEMBER 24, 1976

SEPTEMBER 15, 1978



APPENDIX C

#2 OPERATOR JOB DESCRIPTION

APPENDIX C

ROCK ISLAND REFINING CORP.

JOB DESCRIPTION OF AREA 1 NO. 2 OPERATOR

The following is a summary of responsibilities for the job of #2 Operator. It is intended to aid the person breaking in to learn the job.

1. Treating Light Cat Gasoline (LCG)
2. Treating Heavy Cat Gasoline (HCG)
3. Tank Switching and Gauging
4. Safety
5. Recover slop for feed stock and transfer to the appropriate tank.
6. Chemical Injection
7. Lab results and action to be taken based on the Lab results.
8. Run Oliver Vacuum Filter

Light Cat Gasoline

1. Know flow (including pumps, valves, etc.) from the Debutanizer level control to Light Cat Gasoline Treater (Merox) through the sand filter to storage.
2. Know the flow of caustic circulation for the Light Cat Gas Treater including control valve.
3. In addition to flows, the Treater should know how to:
 - a) Transfer spent caustic from L.C.G.T. to storage Tanks. (What storage Tanks?)
 - b) Blow out lines with air after transfer of spent caustic.
 - c) Get fresh caustic to the Treater
 - 1) Where is fresh caustic stored?
 - 2) Blow out lines with air after transfer completed.
 - d) Where the level should be in the Treater and how to control the level.
 - e) Transfer caustic from sand filter to L.C.G.T.
 - f) Control back pressure on sand filter and treater. What should that pressure be?
 - g) Control the differential pressure across the mixing valve. What should that pressure be?
 - h) Control air rate on the roto meter. What rate should that be?
 - i) Add catalyst to Merox Unit.
 - j) Catch sample of caustic and run Baume' on the sample.
 - k) Interpret Lab results on:
 - 1) Acid Oil
 - 2) Spent Caustic
 - 3) What is done based on Lab results?
- 1) Run Doctor Test for sweetness.
 - 1) Where is sample obtained?
 - 2) What do you do based on results on test?

Heavy Cat Gasoline

1. Know flow of HCG through treaters from HCG pump to storage.
2. Know flow of fresh caustic from storage tank to treater and flow of spent caustic from HCGT to storage tanks, including pumps and valves.
3. In addition to flows, the treater should know:
 - a) Where caustic level should be in treater and how to control it.
 - b) How HCG and caustic is circulated through the treater.
 - c) What is the significance of the caustic circulating pump?
 - d) How much air should be in the treater.
 - e) How to grab sample and run sweetness test. What to do with results. How to grab sample and run caustic test. What to do with results.
 - f) How to run a Baume' on the caustic.
 - g) Know how to interpret Lab analyses of:
 - 1) Acid Oil
 - 2) Spent Caustic
 - 3) Action to be taken based on analysis.

Linde Treater

Storage Tanks.

1. What is the proper way to gauge tanks, to open and close valves?
2. Know what product goes to what tank.

L.C.G.	Sweet Charge
H.C.G.	Slop
L.C.O.	Spent Caustic
Range Oil	
3. Know how and when to water gauge what? How to draw water off product tanks and slop tanks.
4. How is slop lines up to run into the main fractionator or to 1351 Tank.
5. How and where is a BS&W sample taken for Lab? What should BS&W level be and what should be done to keep it at specified level?
6. How is sweet charge lined up from Platformer to fill tank 101. From this same tank to Platformer.
7. Who is notified when tank is full?
8. What is the proper way to switch tanks. Why is there a "proper way"? What happens if switching not done properly?

Job Description of
Area 1 No. 2 Operator
Page 3

Chemical Feed

What chemical is fed where, to what, how much, and if diluted with what?

Safety

What safety precautions should be taken regarding:

- 1) Shot pots
- 2) Valves
- 3) Pressures

Log Sheets

How, when, and why are the log sheets made out.

The trainee should use this summary as a reference in becoming self sufficient as a Treater. If you don't know ask. If something is unusual, ask or tell the Supervisor.

The following are the normal duties of the No. 2 Operator

1. Keep west trap (API separator) in good operating condition at all times.
2. Recover and prepare slop oil for feed stock.
3. Use Oliver Filter to dewater and deoil API separator sludge.
4. Control level of trap (API separator) at all times.
5. Keep any oil that might accumulate off south trap.
6. Check on oxidation ponds agitators.
7. Maintain operation of 561 sump pump and watch level.
8. Make sure line to retention pond is closed at east dike of 561 and 52 tank. Drain in parking lot in west RHRU.
9. Check out gasoline engine at trap every Friday, days, to make sure it will run and pump and that the gasoline tank is full.
10. Maintain operation of Sanitary sewer pumps at No. 1 Cooling Towers and at railroad track, and spray pond lift station pump.
11. Skim oil off API separators for reuse, and to keep oil layer at a minimum.

To Start Oliver

1. Reave speed on drum up.
2. Open water fill control valve, fill drum.
3. Mixer - on
4. Open lower vacuum line all the way.
5. Open top vacuum line, crack open.
6. Start vacuum compressor with valve closed-after compressor picks up speed open valve.
7. Start water pump right away.
8. Close valve on top of Dog house - Bottom 2 valves closed - By-pass open on adder.
9. Adjust valves on precoat adder to open.
10. Set By-pass valve by hand to 40 to 50 lbs.
11. Put in 9-15 bags of precoat into inductor.
12. After adding precoat open by-pass valve all the way and close both to and from adder.
13. Start charge pump - open discharge valve - and be sure pump has suction when you have good pump suction open valve over dog house.
14. Open top vacuum line all the way and close the liquid valve to drum.
15. Make sure you have charge to drum, then start cutting blade.
16. After pulling vacuum of 20#, slow R.P.M.'s down on drum - turn back to about 4#.

Shut Down Oliver

1. Shut down charge pump and close discharge valve.
2. Close over flow, open drain valve drain oliver drum.
3. Shut down elect. water pump.
4. Close vacuum suction valve, then shut down vacuum pump.
5. Close top and bottom vacuum lines.
6. Open wash line until screen is clean, rotate screen at full speed.
7. Pull knife blade all the way back.
8. Leave mixer on until done cleaning.
9. Knock all remaining precoat off of drum.
10. Use water hose to wash sides off and inside of drum. Leave on wash line.
11. Shut valve off under drum, and open over flow, then open lower vacuum line and start elect. water pump and let the water go thru this line to clean - also wash out control valve, shut off elect. water pump. By-pass open on water pump.
12. Open valve under drum and close over flow valve, then shut off wash line and close lower vacuum line.
13. Rinse oil from side, rinse out side and inside of drum.
14. Close drain valve under drum and open over flow valve, open auto. water control valve, fill up with water and let drum run in clean water all night.
15. Shut off mixer.

APPENDIX D

#2 OPERATOR JOB POSITION TEST

APPENDIX D

ROCK ISLAND REFINING CORP.

SCORE: _____

NOTE: ALL QUESTIONS MARKED WITH AN (*) MUST BE ANSWERED CORRECTLY
IN ORDER TO PASS THIS TEST.

NAME: _____

WITNESSED BY: _____

DATE: _____

GIVEN BY: _____

AREA 1 NO. 2 OPERATOR TEST

1. Identify the tanks that you are responsible for, state their normal service, and where product goes that you are responsible for.

Tank Numbers

52
54
58
60
61
552
554
557
558
559

2. What is the purpose of the light and heavy cat gasoline Merox Treaters?

Area 1 No. 2 Operator Test
Page 2

- * 3. What three materials are required to obtain proper reaction to the Treaters?
- * 4. What Baume caustic do you use in light and heavy cat gasoline Merox Treaters?
- 5. What is the proper temperature range for the Merox Treaters? Where are the temperatures read? How do you adjust to get the proper temperature on the two Treaters?
- 6. How much and how often do you add Merox No. 2 to light and heavy cat gasoline treaters?
- 7. How do you line up pump at 201 tank bottom to Platformer from 101 tank?

Area 1 No. 2 Operator Test
Page 3

8. How do you line up caustic to and from Alky Unit?

9. Give Merox a shot.

10. Pump caustic back from LCG Merox Sand Filter.

11. What chemical injections are you responsible for? What are the injection rates?

12. Demonstrate pumping out of caustic.

13. Demonstrate bringing in new caustic.

14. Line up to put caustic to 52 tank.

15. What is the purpose of a salt drum? Which salt drums are you responsible for and what are you suppose to do at each shift?

*16. What steps would you follow to gauge a salt drum?

17. Why is obtaining a correct water gauge important? Why do you water gauge?

18. What problems are caused by a tank being overrun? Where does the oil go and what has to be done to correct the entire situation? If oil is reused, why is it so improtant for tank levels to be controlled so carefully? Do you have a list of the top gauges for each tank?

*19. What must be done on tanks 54-58 before slop can be sent to Main Fractionator?

*20. What Be' caustic do you use in Jet Treater?

*21. What temperature on Kero to Jet do you run?

22. What is normal pressure on Jet Treater? Back Pressure?
Reactor Pressure?

*23. How do you change Jet Reactor Caustic? Flow? How do you pump caustic over reactor? Flow?

24. What is the main purpose of the Trap?

- *25. If red light comes on, showing high level and both lift pumps are running, what should be done to correct trouble?

- 26. Describe operations of Oliver. Start up Precoat, Clean up. Where does oil from Filter go?

- 27. How hot should the slop oil tanks be run to break out the BS&W? What is the maximum BS&W that can be pumped to 52-54 tank?

- 28. Where are all sump pumps and number of pump, Breaker Bus?

- 29. Show how to pump from 2 & 2A to 52-54 tanks.

- 30. Show how to pump out of slop oil pit to 2 & 2A tanks.

31. Show how to drain out of one slop oil tank while pumping into the other.
32. If slop oil pump (P-696) is not working how do you pump slop oil into the breakout tanks?
33. Start up Ford pump at West API. Demonstrate how to prime it.
34. How does water get from East API to Spray Pond? Where does it enter Spray Pond.
35. Show line up for putting East API to West API and Spray Pond.
- *36. Show how to line Traps up for cleaning.

- *37. List pump numbers and Bus rack numbers that breakers are located on. For Treaters, Caustic Blending, Trap Area.

APPENDIX E



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 11 1982

MEMORANDUM

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

SUBJECT: Hazardous Waste Delisting Petitions

FROM: James D. Bunting *JB*
Acting Deputy Associate Enforcement Counsel

TO: Regional Notification Contacts

The Waste Characterization Branch, OSW, has informed us that, pursuant to 40 CFR §260.20 and 22, OSW has made preliminary determinations to grant delisting petitions to the facilities listed in Attachment A. As you know, the Agency retains the authority to reverse these decisions if it receives additional information indicating that these wastes are hazardous under 40 CFR §261.11 or 40 CFR §261.30.

The determinations indicated will apply only to the Federal hazardous waste management system established under RCRA. States remain free to take any action they deem appropriate under their independent authority with regard to these wastes.

The authorized programs in some States include delisting provisions which, as indicated in the State's Memorandum of Agreement (MOA), require EPA review and concurrence as part of the State's delisting decisions. The Agency has reviewed the petitions from facilities in States within this category, and has indicated its concurrence by the determinations presented in Attachment A. In the list of petitioners in Attachment A, the States within this category are indicated by an asterisk (*).

Until the delisting is published in the Federal Register (the effective date of the delisting) we recommend the use of enforcement discretion, as discussed in Sarah Compton's memo of January 13, 1981, when dealing with these wastes at these facilities.

If there are any problems or questions about these actions please contact Myles Morse or William Sproat (Waste Characterization Branch, OSW (755-9187)).

Attachment

cc: M. Straus, OSW (WH-565B)
M. Morse, OSW (WH-565B)
W. Sproat, OSW (WH-565B)

T. Kimmel, OSW (WH-565B)
W. Miser, OSW (WH-565B)

Attachment A

<u>Region</u>	<u>Facility Name</u>	<u>Hazardous Waste Exclusion</u>	<u>Location</u>	<u>ID No.</u>
IV	*Intex Plastics Corporation	F005(a)	Corinth, MS	MSD096076781
V	Monsanto Chemical Intermediates Co.	K071(b)	Sauget, IL	ILD000802702
	Rock Island Refining Corporation	K049(c) K050(d) K051(c)	Indianapolis, IN	IND006417430
VII	Loxscreen Company Inc	F019(e)	Hayti, MO	MOD057758922
	Ramsey Corporation/ TRW Inc.	F006	Sullivan, MO	MOD094390416

- (a) Temporary exclusion applies only to still bottom waste which has been "air-cured" for at least five days.
- (b) Representative samples to be analyzed by EPA/EP prior to disposal; waste which exceeds an extract concentration of 25 times the National Interim Primary Drinking Water Standard will be retreated or handled as a hazardous waste.
- (c) Temporary exclusion applies only in a land disposal scenario for this waste
- (d) This waste is not considered hazardous when mixed with other non-hazardous wastewaters at the facility. (see amendment to the mixture rule FR November 17, 1981).
- (e) Waste must be covered as a daily practice or each batch tested for total cyanide prior to disposal due to the Agency's concern about photoconversion. If total cyanide in the waste exceeds 10ppm the waste must be covered as a daily practice. Photoconversion test data may be submitted to eliminate this condition.

ATTACHMENT "C"



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF SOLID WASTE

MAR 12 1982

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Mr. William E. Laque
Coordinator of Environmental Affairs
Rock Island Refining Corporation
P.O. Box 68007
Indianapolis, Indiana 46268

Dear Mr. Laque:

This letter confirms my telephone conversation with Mr. George W. Pendygraft of Baker and Daniels concerning the delisting petition filed by the Rock Island Refining Corporation. The Agency's Office of Solid Waste has completed a preliminary review of the petition and has indicated in the enclosed memorandum that the vacuum filter cake waste, listed for containing slop oil emulsion solids (K049), heat exchanger bundle cleaning sludges (K050), and API separator sludges (K051), is considered non-hazardous. This memorandum has been sent to the Regional Office of Enforcement. Any additional letters of confirmation may be obtained from Ms. Sally Swanson in the Regional Office. The temporary exclusion will appear in the Federal Register in the next few months.

Sincerely,

A handwritten signature in cursive script, reading "Todd A. Kimmell".

Todd A. Kimmell, Environmental Scientist
Waste Characterization Branch
Hazardous and Industrial Waste Division (WH-565B)

Enclosure

cc:

Matt Straus (OSW)
George Pendygraft ✓

APPENDIX F

Ex. 4
CBI

AMERICAN FLETCHER NATIONAL BANK

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

Ex. 4
CBI

APPENDIX G

ENDORSEMENT OF INSURANCE



GL 04 20
(Ed. 07 82)

This endorsement forms a part of the policy to which attached, effective on the inception date of the policy unless otherwise stated herein.

(The following information is required only when this endorsement is issued subsequent to preparation of policy.)

Endorsement effective

Policy No.

Endorsement No.

Named Insured

Additional Premium \$ _____

Countersigned by

Mary Ellen Ridley
(Authorized Representative)

This endorsement modifies such insurance as is afforded by the provisions of the policy relating to the following:

**COMPREHENSIVE GENERAL LIABILITY INSURANCE
MANUFACTURERS AND CONTRACTORS LIABILITY INSURANCE
OWNERS, LANDLORDS AND TENANTS LIABILITY INSURANCE
SMP LIABILITY INSURANCE**

HAZARDOUS WASTE FACILITIES — AMENDATORY PROVISIONS

It is agreed that the following additional provisions apply with respect to a Hazardous Waste Treatment, Storage, or Disposal Facility subject to the financial responsibility requirements of 40 CFR Part 264.147 or 265.147 (Environmental Protection Agency Regulations); provided that the name, address or location, and EPA Identification Number of such facility are shown in the Schedule below.

1. The following provisions apply, in place of the limits of liability provisions shown elsewhere in this policy, to the company's liability for damages because of bodily injury or property damage arising out of a sudden and accidental discharge, dispersal, release or escape of irritants, contaminants or pollutants from any facility shown in the Schedule of this endorsement.

Regardless of the number of: (1) facilities shown in the Schedule of this endorsement; (2) insureds under this policy; (3) persons or organizations which sustain bodily injury or property damage; or (4) claims made or suits brought:

(a) the total liability of the company for all damages because of all bodily injury and all property damage shall not exceed the limit of liability shown in the Schedule of this endorsement as "aggregate;"

(b) subject to (a), the total liability of the company for all damages because of all bodily injury and all property damage arising out of a single occurrence shall not exceed the limit of liability shown in the Schedule of this endorsement as "each occurrence."

For the purpose of determining the limit of the company's liability, all bodily injury and property damage arising out of a sudden and accidental discharge, dispersal, release or escape of irritants, contaminants or pollutants, including all bodily injury and property damage arising out of all subsequent exposure of persons and property to such substances, shall be considered as arising out of a single occurrence.

2. The company shall pay any applicable deductible amount and, upon notification of such payment, the named insured shall promptly reimburse the company for the amount so paid. This provision does not apply with respect to that amount of any deductible for which financial responsibility is demonstrated as specified in 40 CFR 264.147 (f) or 265.147 (f).

3. Neither the company nor the insured may terminate the insurance provided herein for any facility except by providing written notice to the other party and the Regional Administrator(s) of the EPA Region(s) in which such facility(ies) is (are) located. Termination by cancellation shall be effective no fewer than sixty (60) days after such written notice is received by the Regional Administrator; other termination shall be effective no fewer than thirty (30) days after receipt of such notice.

SCHEDULE

Name of Facility	Address or Location	EPA Identification Number
ROCK ISLAND REFINING CORPORATION	5000 W. 86TH STREET INDIANAPOLIS, INDIANA	IND. 006417430

Limits of Liability

\$ 2,000,000 aggregate
\$ 1,000,000 each occurrence

Additional Premium \$ 1,000,000
INCLUDED

CONFIDENTIAL

Ex. 4
CBI

Ex. 4
CBI

APPENDIX H

APPENDIX H

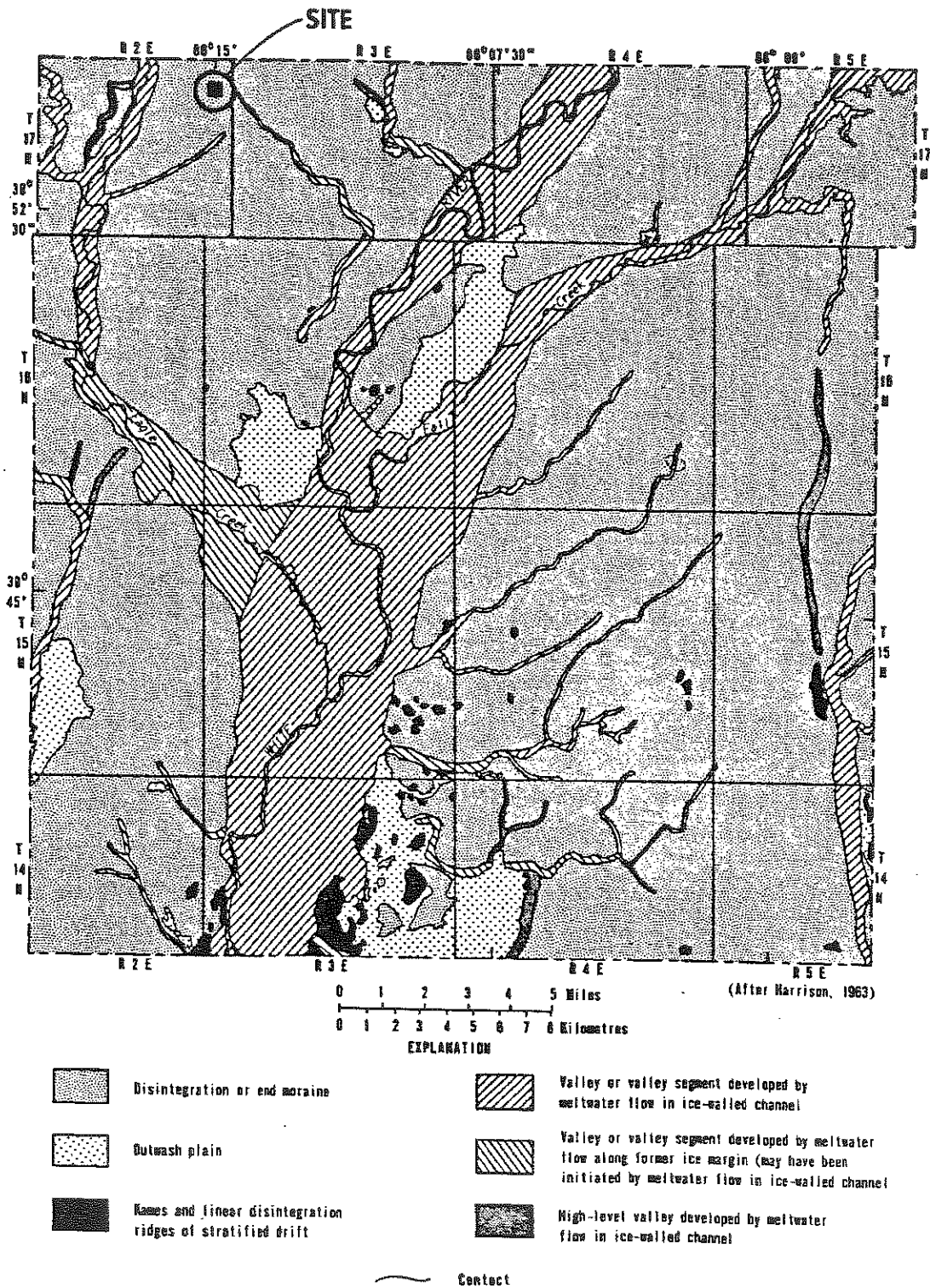
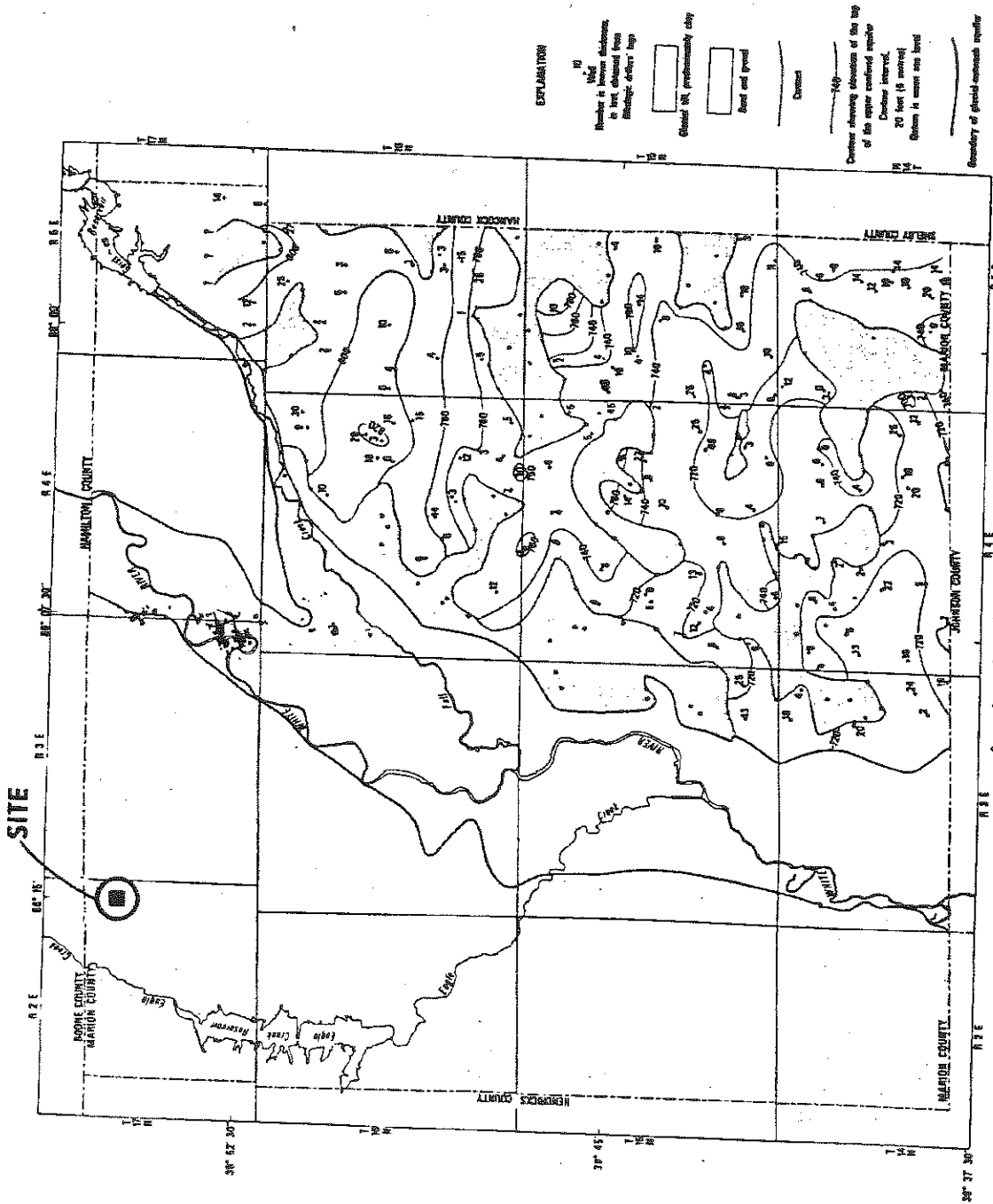


Figure 3.— Surficial geology of Marion County

Reference: U.S. Geological Survey Open File Report 75-312

APPENDIX I

APPENDIX I



ATEC ASSOCIATES

APPENDIX J

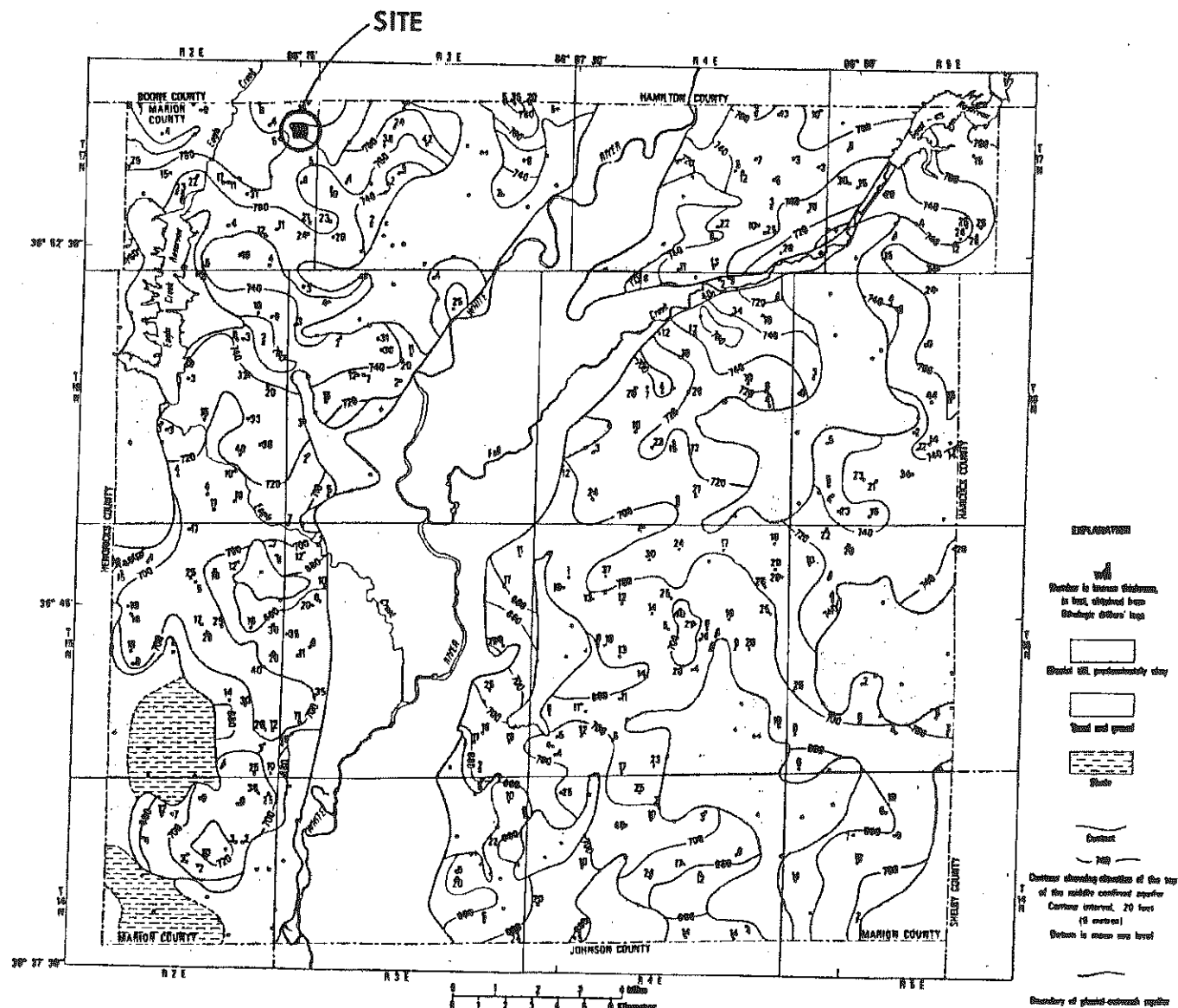


Figure 5. -- Areal distribution, points of known thickness, and the approximate elevation of the surface of the middle confined aquifer

Reference: U.S. Geological Survey Open File Report 75-312

APPENDIX K

APPENDIX K

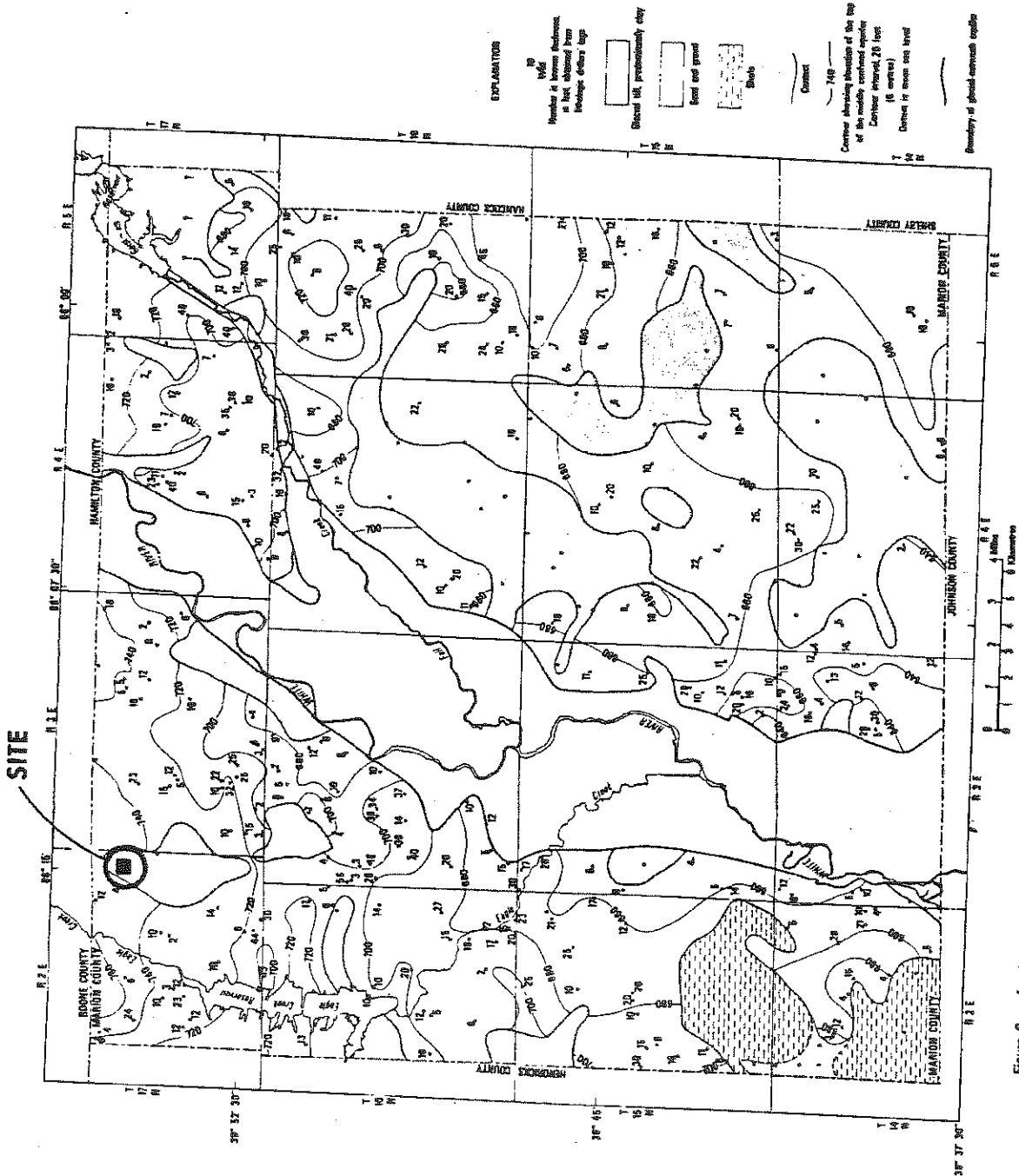


Figure 8. -- Areal distribution, points of known thickness, and the approximate elevation of the surface of the lower confined aquifer

Reference: U.S. Geological Survey Open File Report 75-312

APPENDIX L

APPENDIX L

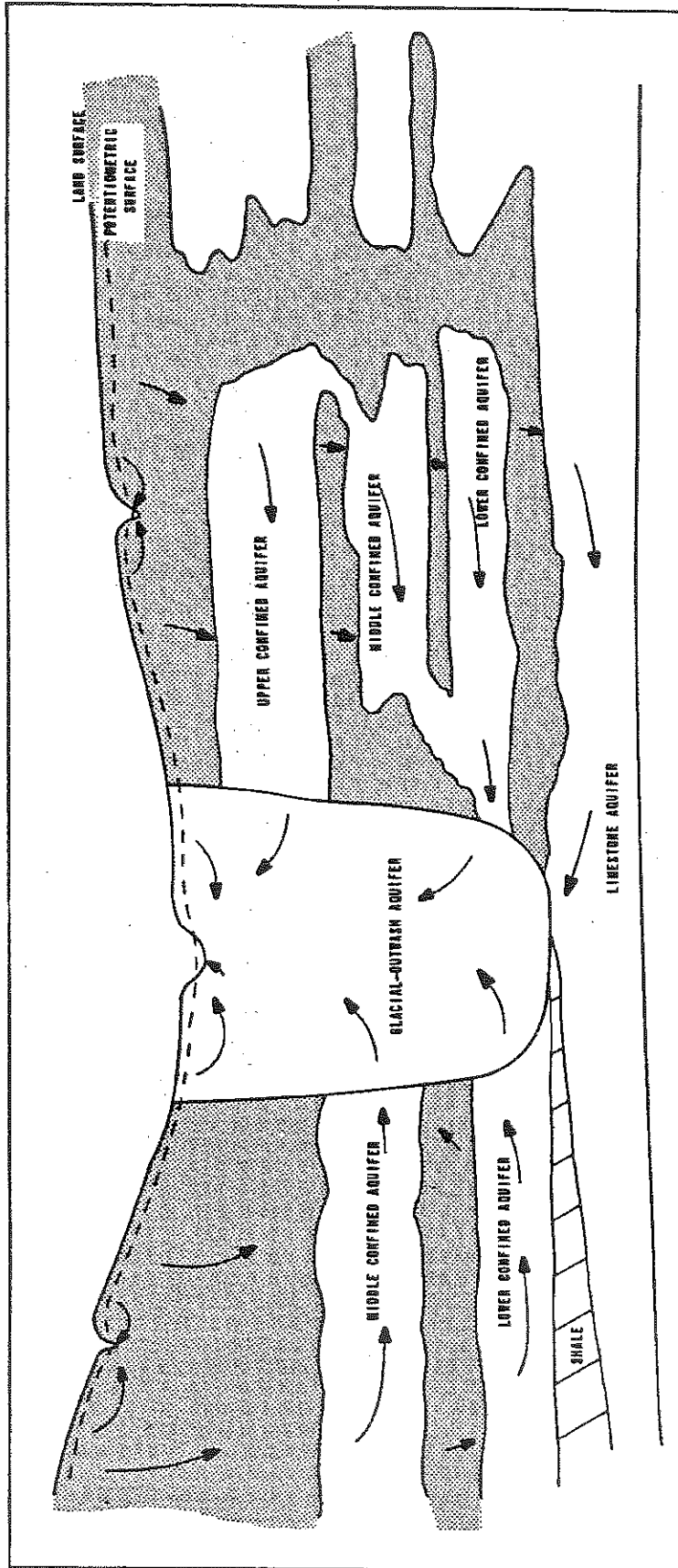


Figure 8.-- Idealized west to east cross section with arrows indicating direction of ground-water flow

Reference: U.S. Geological Survey Open File Report 75-312

APPENDIX M

WATER WELL RECORDS

Figure B1: Approximate Water Well Location Map

Water Well Records

Ex. 9

Wells

APPROXIMATE WATER WELL LOCATION MAP
LAND APPLICATION PROGRAM
ROCK ISLAND REFINING CORP.
INDIANAPOLIS, INDIANA

La corporació

☐ TEST

☐ PERMANENT

Job No. C-8603

[illegible]

_____ 8 _____ inch diameter hole drilled by ☒ Cable Tool ☐ Rotary ☐ Jetting
Pipe left in hole _____

Date Started 1-31-61 Finished 2-3-61 Harry A. Smith
DEALER

3

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
609 STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209
MElrose 3-6757

WATER WELL RECORD

INFORMATION ON WELL LOCATION

County in which well was drilled: Ex. 9 2 lines Civil Township: _____

Congressional township: _____ Range: _____ Number of section: _____

(Fill in as completely as possible)

Describe in your own words the well location with respect to nearby towns, roads, streets
or distinctive landmarks: Ex. 9 2 lines

Name of owner: Ex. 9 2 lines Address: Ex. 9 2 lines

Name of Well Drilling Contractor: Harry H. Fox & Sons,

Address: Route 6,
Shelbyville, Indiana.

Name of Drilling Equipment Operator: Cedric Hoban.

INFORMATION ON THE WELL

Completed depth of well: 285 ft. Date well was completed: 11-2-65

Diameter of outside casing or drive pipe: 4" Length: 189'4"

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: _____ Length: _____ Slot size: _____

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☒ For industry ☐ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 85 ft.

Bailer Test: Hours tested 2 Rate 7 g.p.m. Drawdown 10 115 ft. (Difference between

Pumping Test: Hours tested _____ Rate _____ g.p.m. Drawdown _____ ft. static level and water level at end of test)

Signature Harry H. Fox & Sons, 10, Fox

Date 11-2-65

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

3. ad

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

85 ft. to static water-level. Tested at 9	GPM water
lowers to 115 ft. Pumped well 3 hrs. till	clear and clean.

INSTRUCTIONS

-187-

Aut. March Dec.

WATER WELL LOG

4

FOR ADMINISTRATIVE USE ONLY
(Well Driller does not fill out)

COUNTY:

Topo. Map:

TWP. 17N

RGE. 2E

1/4

NE 1/4

SE 1/4

SEC. 24

El. of Grnd. surface at well: 880.5

Depth to bedrock: 135

Well Log processed by: J. L. H. 1002

DR = 745

Loc. accepted w/o verification (Yes) No

Courthouse Loc.

By Date

Field Located

By Date

Placed in Master Well Log File Date 2/22/69

From

To

FORMATIONS (Color, type of material, hardness, etc.)

REMARKS:

plotted on Marion C. bedrock map by UCF 3-27-69

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning water well. We request that you be as accurate as possible in recording this information as it will be of great assistance in the planning and development of new water supplies. An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location. As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana.

STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209

MEIrose 3-6757

WATER WELL RECORD

EX. 9 2 lines
INFORMATION ON WELL LOCATION

County in which well was drilled: EX. 9 1 line Civil Township: EX. 9 1 line
Congressional township: _____ Range: _____ Number of section: _____
(Fill in as completely as possible)
Describe in your own words the well location with respect to nearby towns, roads, streets
or distinctive landmarks: EX. 9 1 line

Name of owner: EX. 9 1 line Address: EX. 9 1 line
Name of Well Drilling Contractor: Earl H. Merritt Well Drilling Co., Inc.
Address: 2998 Westlane Rd.
Name of Drilling Equipment Operator: Donald Kennedy

INFORMATION ON THE WELL

Completed depth of well: 47 ft. Date well was completed: Aug. 29, 1969
Diameter of outside casing or drive pipe: 4" Length: _____
Diameter of inside casing or liner: _____ Length: _____
Diameter of Screen: 3" Length: 4' Slot size: #8
Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____
Use of Well: For home ☐ For industry ☒ For public supply ☐ Stock ☐
Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐
Static water level in completed well (Distance from ground to water level) 15 ft.
Bailer Test: Hours tested 1/2 Rate 10 g.p.m. Drawdown _____ ft. (Difference between
Pumping Test: Hours tested 2 Rate 5 g.p.m. Drawdown 20 ft. static level and water
level at end of test)

Signature Thomas B. Hubley

Date _____

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

SEP 27 1969

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

Adm. Sec. H. H. H. H.



COUNTY MARION TWP. 17N RGE. 2E 1/4 NE SEC 24 Subdivision Name _____

Topo Map CARMEL 7 1/2 _____

Field Located By _____ Date _____

Courthouse Location By _____ Date _____

Location accepted w/o verification by BRUNS 12/28/79 _____

_____ Ft W of EL. Ground Elevation _____

_____ Ft N of SL. Depth to bedrock 125 _____

_____ Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

WATER WELL RECORD

PERMIT NO. _____

COUNTY MARION

CIVIL TOWNSHIP _____

DRIVING DIRECTIONS

B500 N. GEORGETOWN

WELL OWNER

GOLDEN IMPERIAL

BUILDING CONTRACTOR

T. & W. CORP.

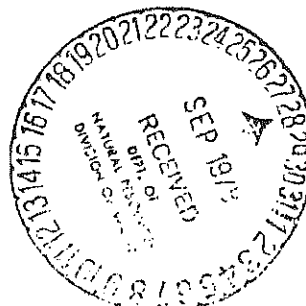
DRILLING EQUIPMENT OPERATOR

LESTER HARNESS

WELL INFORMATION

WELL INFORMATION											
WELL PTH	CASING DIAMETER	LENGTH	LINER DIAM.	LENGTH	DIAM.	SCREEN LENGTH	SLOT	TYPE OF WELL	USE OF WELL	METHOD OF DRILLING	DATE WELL COMPLETED
10	4" STL	125						DRILLED	COMMERCIAL	ROTARY	7/10/79
STATIC WATER LEVEL						BAILER TEST				PUMP TEST	
150						HOURS TEST		RATE G.P.M.		DRAWDOWN	
										200 F/L	

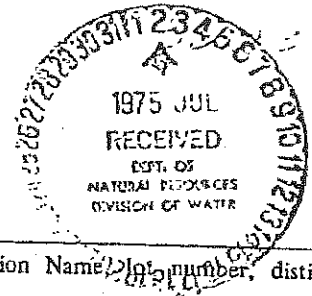
FORMATIONS (COLOR, TYPE OF MATERIAL, HARDNESS, ETC.)	FROM	TO
OF SOIL & CLAY	0	125
IMESTONE	125	310



HAMILTON BROS. INC.
P.O. BOX 24181
4025 ROCKVILLE ROAD
INDIANAPOLIS, IND. 46224

STATE COPY

WATER WELL RECORD



WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled _____ Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner _____ Address _____

Building Contractor _____ Address _____

Name of Well Drilling Contractor: _____

Address _____

Name of Drilling Equipment Operator: _____

WELL INFORMATION

Depth of well: _____ Date well was completed: _____

Diameter of casing or drive pipe: _____ Total Length: _____

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: _____ Length: _____ Slot Size: _____

Type of Well: Drilled ☐ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☐ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) _____ feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature _____

Date _____

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

(Well d. does not fill out)

TWP. 17N

RCE. 2E

 $\frac{1}{2}SW \quad \frac{1}{2}SW$

SEC 12

Subdivision Name

Topo Map Zionsville 7K

Field Located

By

Date _____

Courthouse Location By

By

Date _____

Location accepted w/o verification by

TMB 7-75

Ft W of EL.

Ground Elevation.

-Ft N of SL.

Depth to bedrock.

— Ft E of WL.

Bedrock elevation.

FILE 5 of NL.

Aquifer elevation

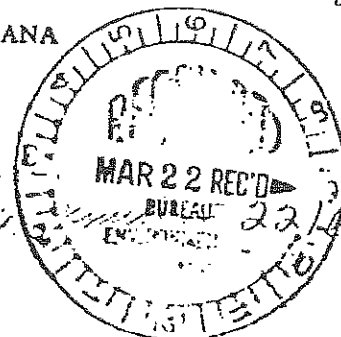
Lot Number

10

Form

FORMATIONS (Color, type of material, hardness, etc.)

8



WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Albany Civil Township

Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner  Address 

Building Contractor _____ Address _____

Name of Well Drilling Contractor: H. A. ...

Address

Name of Drilling Equipment Operator: John A. Jones

WELL INFORMATION

Depth of well: 1.07

Date well was completed: 11/6/72

Diameter of casing or drive pipe: 4" Total Length: 100'

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 1 Length: 2 Slot Size: 100

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☒ For Industry ☐ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) _____ feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. _____ Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Pumping Test: Hours Tested 4 Rate 6 g.p.m. 20 Drawdown ft.

Signature _____

Date _____

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled EX. 9 3 lines Civil Township EX. 9 3 lines
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

EX. 9 3 lines redacted

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner EX. 9 3 lines Address EX. 9 3 lines

Building Contractor _____ Address _____

Name of Well Drilling Contractor: WALLACE WELL DRILLING, Inc.

Address R. R. 7 Box 231 GR. RD.

Name of Drilling Equipment Operator: CHAS. R. WALLACE

WELL INFORMATION

Depth of well: 45' Date well was completed: 6-11-80

Diameter of casing or drive pipe: 4" Total Length: 42'

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 4" Length: 3' Slot Size: 40

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 8 feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested AIR Rate 20 g.p.m. Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature Charles R. Wallace

Date 7-8-80

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

COUNTY Marion TWP. 17 N RGE. 2 E SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW SEC 13

Subdivision Name _____

Topo Map Zionville 22

Field Located By JPR Date 5/30/74

Courthouse Location By _____ Date _____

Location accepted w/o verification by _____

_____ Ft W of EL. Ground Elevation 885

500 Ft N of SL. Depth to bedrock _____

500 Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation 786 Lot Number _____

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)

From To

0 17

17 100

Clay
Shale

W/L 45.71 = 839

X-Section #20 - Middle Unit (h)

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317



WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Tippecanoe Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner Tolson Address 545 N. Park St.

Building Contractor _____ Address _____

Name of Well Drilling Contractor: Hemmer 12-1-71

Address _____

Name of Drilling Equipment Operator: Joe Starnell

WELL INFORMATION

Depth of well: 111 Date well was completed: 9/1/71

Diameter of casing or drive pipe: 4" x 10' Total Length: _____

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 4 Length: 2 Slot Size: 1/2"

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☒ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) _____ feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested 2 Rate 12 g.p.m. Drawdown 12 ft.

(Drawdown is the difference between static level and water level at end of test)

Signature Joe Starnell

Date 9-3-71

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

(Well Δ does not fill out)

Marion

TWP.

172

L RGE

2

2.

10

-

2

15

Subdivision Name

Topo Map

Zinn, 1922.

Field Located

By

Date _____

Courthouse Location By

By

Date _____

Location accepted w/o verification by

Ft W of EL.

Ground Elevation

_Ft N of SL.

Depth to bedrock.

_Ft E of WL.

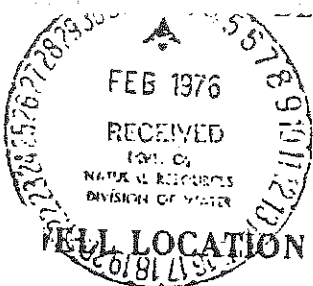
Bedrock elevation.

—Ft S of NL.

Aquifer elevation .

Lot Number.

[illegible]



DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317

10

Permit # 3660

WATER WELL RECORD

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Madison Civil Township
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

3520 Madison

N

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner for Reloading Address

Building Contractor Mr. Russell Address

Name of Well Drilling Contractor: Madison Bros. Inc.

Address P.O. Box 24771, Indianapolis, Ind.

Name of Drilling Equipment Operator: Bill Jones

WELL INFORMATION

Depth of well: 62' Date well was completed: 10/16/75

Diameter of casing or drive pipe: 5" p.v.c. Total Length: 59'

HOLE
Diameter of liner (if used): 36" Total Length:

Diameter of Screen: 5" Length: 2' Slot Size: .030

Type of Well: Drilled ☐ Gravel Pack ☒ Driven ☐ Other

Use of Well: For Home ☒ For Industry ☐ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☒

Static water level in completed well (Distance from ground to water level) feet

Bailer Test: Hours Tested Rate g.p.m. Drawdown ft.

Pumping Test: Hours Tested 1 Rate 5 g.p.m. Drawdown 55 ft.

(Drawdown is the difference between static level and water level at end of test)

Signature

Date

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

(Well driller does not fill out)

Topo Map 210101115 77

Courthouse Location By _____ Date _____

Location accepted w/o verification by 500015 7 2 72

_____ Ft W of EL. Ground Elevation _____

_____ Ft N of SL. Depth to bedrock _____

_____ Ft E of WL. Bedrock elevation_____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

[illegible]

11

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled: EX.9 1 line Civil Township: EX.9 1 line
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

EX.9 3 lines redacted

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner: EX.9 1 line Address: EX.9 1 line

Building Contractor: _____ Address: _____

Name of Well Drilling Contractor: WALLACE WELL DRILLING, Inc.

Address: R.R. 7 Box 231 GR. F.D.

Name of Drilling Equipment Operator: CHAS. R. WALLACE

WELL INFORMATION

Depth of well: 45'

Date well was completed: 6-11-80

Diameter of casing or drive pipe: 4" Total Length: 42'

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 4" Length: 3' Slot Size: 40

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 8 feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested AIR Rate 20 g.p.m. Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature: Charles R. Wallace

Date: 7-8-80

(Well driller does not fill out)

Topo Map Juniata 7'2"

Courthouse Location By _____ Date _____

Location accepted w/o verification by JR 7-11-80

_____ Ft W of EL. Ground Elevation _____

_____ Ft N of SL. Depth to bedrock _____

_____ Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

[illegible]

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Madison Civil Township Madison
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.
1/2 mi. west 96th St.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner _____ Address _____

Building Contractor Highway Co Address _____

Name of Well Drilling Contractor: Hammill Drilling Co.

Address 1128 Rockville Rd.

Name of Drilling Equipment Operator: Robert Johnson

WELL INFORMATION

Depth of well: 120' Date well was completed: 11/1/77

Diameter of casing or drive pipe: 11" Total Length: 120'

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 4" Length: 5' Slot Size: 2/10

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 40' feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested _____ Rate 10 g.p.m. Drawdown 10' ft.

(Drawdown is the difference between static level and water level at end of test)

Signature Robert Johnson

Date 11/1/77

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

FOR ADMINISTRATIVE USE ONLY
(Well driller does not fill out)

COUNTY Marion

TWP.

RCE.

Figure 10

NE $\frac{1}{4}$ NW $\frac{1}{4}$

SEC

Subdivision Name

Topo Map

Field Located

By

Date _____

Date 5/30/74

Courthouse Location By

By

Date _____

Location accepted w/o verification by

1000 Ft W of EL.

Ground Elevation 890

—Ft N of SL.

Depth to bedrock

_Ft E of WL.

Bedrock elevation

100 Ft S of NL.

Aquifer elevation 778

Lot Number

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)

10

Form

12

12

2

2

100

Land and Canal

$$\frac{i\omega/L}{49.90} = 240$$

11

X-Section # 21 - Middle Unit (b)

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Marion Civil Township Pike
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

Rock Island Refinery

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner Rock Island Refinery Address RD 100

Building Contractor _____ Address _____

Name of Well Drilling Contractor: Hamilton Bros

Address _____

Name of Drilling Equipment Operator: Robert Edwards

WELL INFORMATION

Depth of well: 555

Date well was completed: 3-10-60

Diameter of casing or drive pipe: 10 Total Length: _____

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: _____ Length: _____ Slot Size: _____

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 90 feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested 24 Rate 25-35 g.p.m. Drawdown 525 ft.

(Drawdown is the difference between static level and water level at end of test)

Signature Old Log card - no

Date Citations or dates

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

2-9-73

Rock Island

Ref.

TWP. 12 N RGE

2F

 $\frac{1}{2}$

14

SEC

13

Subdivision Name

Topo Map

Caswell 75

Field Located

By

Date _____

Courthouse Location

By

Date

Location accepted w/o verification by

_Ft W of EL.

Ground Elevation

Ft N of SL.

Depth to bedrock

Ft E of WL.

Bedrock elevation

Ft S of NL.

Aquifer elevation

Lot Number

[illegible]

14

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209
MElrose 3-6757
WATER WELL RECORD

INFORMATION ON WELL LOCATION

Ex 9 5 lines redacted

Name of Well Drilling Contractor: English & Son, Inc.

Address: R. R. # 1 Clayton, Indiana

Name of Drilling Equipment Operator: Dester Harness

INFORMATION ON THE WELL

Completed depth of well: 85 ft. Date well was completed: March 21, 1957

Diameter of outside casing or drive pipe: 6 1/2 in. Length: 70 ft.

Diameter of inside casing or liner: 6 in. Length:

Diameter of Screen: 4 in. Length: 7 1/2 ft. Slot size: 80

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other

Use of Well: For home ☐ For industry ☒ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 30 ft.

Bailer Test: Hours tested Rate 50 g.p.m. Drawdown 4 1/2 f. (Difference between static level and water level at end of test)

Pumping Test: Hours tested Rate g.p.m. Drawdown ft.

Signature Dester Harness

Date March 21, 1957

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

[illegible]

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies. An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location. As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water.

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317

Print # 1858

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled MARION Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner _____ Address Rd 101 - 3 miles E - 300E

Building Contractor Jack Irish Pllg Address _____

Name of Well Drilling Contractor: Hamilton Bros.

Address _____

Name of Drilling Equipment Operator: C. L. Rush

WELL INFORMATION

Depth of well: 115' Date well was completed: 7-6-72

Diameter of casing or drive pipe: 4" B Total Length: 111

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: _____ Length: 5 Slot Size: _____

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 75' PL - 6.00 feet

Bailer Test: Hours Tested 1/2 Rate 10 g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature C. L. Rush

Date 7-6-72

FOR ADMINISTRATIVE USE ONLY
(Well, it does not fill out)

COUNTY Marion TWP. 17N RGE. 2E SEC. 24 Subdivision Name

Topo Map Zionsville 73

Field Located ☒ By _____ Date _____

Courthouse Location By _____ Date _____

Location accepted w/o verification by _____

_____ Ft W of EL Ground Elevation _____

_____ Ft N of SL. Depth to bedrock _____

_____ Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

10

From

FORMATIONS (Color, type of material, hardness, etc.)

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209

WATER WELL RECORD

Permit #
572

INFORMATION ON WELL LOCATION

County in which well was drilled: MADISON Civil Township: _____
Congressional township: _____ Range: _____ Number of section: _____
(Fill in as completely as possible)
Describe in your own words the well location with respect to nearby towns, roads, streets
or distinctive landmarks: _____

Name of owner: George H. Jones Address: 2002 W. 10th St.
Name of Well Drilling Contractor: Hamilton Co. Inc.
Address: _____
Name of Drilling Equipment Operator: W. R. R. Jr.

INFORMATION ON THE WELL

Completed depth of well: 76 ft. Date well was completed: 2/10/72
Diameter of outside casing or drive pipe: 4" alb Length: 75'
Diameter of inside casing or liner: _____ Length: _____
Diameter of Screen: 3" Length: 5' PVC Slot size: 1/4"
Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____
Use of Well: For home ☐ For industry ☒ For public supply ☐ Stock ☐
Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐
Static water level in completed well (Distance from ground to water level) _____ ft.
Bailer Test: Hours tested _____ Rate _____ g.p.m. Drawdown _____ ft. (Difference between
Pumping Test: Hours tested _____ Rate 1.2 g.p.m. Drawdown 1.5 ft. static level and water
level at end of test)

Signature _____
Date _____

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)	From	To
CLAY	0	1
CLAY	1	2
CLAY	2	3
CLAY	3	4
CLAY	4	5
CLAY	5	6
CLAY	6	7
CLAY	7	8
CLAY	8	9
CLAY	9	10
CLAY	10	11
CLAY	11	12
CLAY	12	13
CLAY	13	14
CLAY	14	15
CLAY	15	16
CLAY	16	17
CLAY	17	18
CLAY	18	19
CLAY	19	20
CLAY	20	21
CLAY	21	22
CLAY	22	23
CLAY	23	24
CLAY	24	25
CLAY	25	26
CLAY	26	27
CLAY	27	28
CLAY	28	29
CLAY	29	30
CLAY	30	31
CLAY	31	32
CLAY	32	33
CLAY	33	34
CLAY	34	35
CLAY	35	36
CLAY	36	37
CLAY	37	38
CLAY	38	39
CLAY	39	40
CLAY	40	41
CLAY	41	42
CLAY	42	43
CLAY	43	44
CLAY	44	45
CLAY	45	46
CLAY	46	47
CLAY	47	48
CLAY	48	49
CLAY	49	50
CLAY	50	51
CLAY	51	52
CLAY	52	53
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CLAY	56	57
CLAY	57	58
CLAY	58	59
CLAY	59	60
CLAY	60	61
CLAY	61	62
CLAY	62	63
CLAY	63	64
CLAY	64	65
CLAY	65	66
CLAY	66	67
CLAY	67	68
CLAY	68	69
CLAY	69	70
CLAY	70	71
CLAY	71	72
CLAY	72	73
CLAY	73	74
CLAY	74	75
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CLAY	77	78
CLAY	78	79
CLAY	79	80
CLAY	80	81
CLAY	81	82
CLAY	82	83
CLAY	83	84
CLAY	84	85
CLAY	85	86
CLAY	86	87
CLAY	87	88
CLAY	88	89
CLAY	89	90
CLAY	90	91
CLAY	91	92
CLAY	92	93
CLAY	93	94
CLAY	94	95
CLAY	95	96
CLAY	96	97
CLAY	97	98
CLAY	98	99
CLAY	99	100

COUNTY: Maine TWP. 17N RGE. 2E NE 1/4 NW 1/4 SEC. 13

Topo Map: Champlain

Well log classified By _____ Date _____

Courthouse located By _____ Date _____

Field located By _____ Date _____

Acc. w/o verification By WCH Date 7-17-70

Ft W of EL. Ground elevation _____

Ft N of SL. Depth to bedrock _____

Ft E of WL. Bedrock elevation _____

Ft S of NL. Aquifer elevation _____

REMARKS:

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies.

An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location.

As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water

WCH

17

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
609 STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209
MElrose 3-6757

WATER WELL RECORD

Permit #599

INFORMATION ON WELL LOCATION

Ex. 9. 6 lined redacted

Name of Well Drilling Contractor: Earl H. Merritt Well Drilling Co.

Address: 2998 Westlane Rd.

Name of Drilling Equipment Operator: Don Kennedy

INFORMATION ON THE WELL

Completed depth of well: 40 ft. Date well was completed: March 2/1970

Diameter of outside casing or drive pipe: 4" Length: 37'

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: 3" Length: 11' Slot size: No. 8

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☐ For industry ☒ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 15 ft.

Bailer Test: Hours tested 1/4 Rate 5 g.p.m. Drawdown _____ ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 2 Rate 5 g.p.m. Drawdown 20 ft. level at end of test)

Signature Thomas B. Hadley

Date _____

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies.

An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location.

As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana Department of Conservation.

DIVISION OF WATER RESOURCES
INDIANA DEPARTMENT OF CONSERVATION
609 STATE OFFICE BUILDING
INDIANAPOLIS 9, INDIANA

WATER WELL RECORD

INFORMATION ON WELL LOCATION

EX. 9 S lines redacted

Name of Well Drilling Contractor: C. A. Martin

Address: Aston Ind.

e of Drilling Equipment Operator: Brian D...

INFORMATION ON THE WELL

Completed depth of well: 125 ft. Date well was completed: 4-4-68

Diameter of outside casing or drive pipe: 4" Length: _____

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: 3" Length: 4' 4" Slot size: 6

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☒ For industry ☐ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 90 ft.

Bailer Test: Hours tested 7 Rate 5 g.p.m. Drawdown 10 ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested _____ Rate _____ g.p.m. Drawdown _____ ft. level at end of test)

Signature Brian D...

Date 4-4-68

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

WATER WELL LOG

18

FORMATIONS (Color, type of material, hardness, etc.)

From

To

yellow clay
 7. Brn. hardpan
 Dark brn. hardpan
 black sand & gravel

0 29'
 29' 65'
 65 119'
 119' 125'

890 ±
 - 119 -
 771

890
 - 20
 870

REMARKS:

COUNTY:

Marion

TWP. 17N RGE. 2E

SEC. 12-14

FOR ADMINISTRATIVE USE ONLY
 (Well Driller does not fill out)

Topo Map:

22-22-22

Loc. accepted w/o verification

Yes ☒ No ☐

Well log classified

By W. H. H.

Date

Ground elevation

Ft W of EL

Courthouse located

By

Date

Depth to bedrock

Ft N of SL

Field located

By

Date

Bedrock elevation

Ft E of WL

Placed in master well log file

Date

Aquifer elevation

Ft S of NL

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies.

An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location.

As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water Resources, Indiana Department of Conservation.

WATER WELL RECORD

Permit # 2580

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Madison Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner _____ Address _____

Building Contractor Walter L. Little Address 5760 W. Rockingham St.

Name of Well Drilling Contractor: Walter L. Little

Address _____

Name of Drilling Equipment Operator: Walter L. Little

WELL INFORMATION

Depth of well: 103 Date well was completed: 6/20/73

Diameter of casing or drive pipe: 4" 1/2 Total Length: 101

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 4 Length: 2' Slot Size: #16

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☒ For Industry ☐ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) _____ feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. Drawdown _____ ft.

Pumping Test: Hours Tested 2 Rate 10 g.p.m. 65 Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature Walter L. Little

Date 6/20/73

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

FOR ADMINISTRATIVE USE ONLY

(Well driller does not fill out)

COUNTY _____ TWP. 17-1 RGE. 2E $\frac{1}{4}$ SW SEC. 13 Subdivision Name _____Topo Map 2 in. scale

Field Located By _____ Date _____

Courthouse Location By _____ Date _____

Location accepted w/o verification by _____

_____ Ft W of EL. Ground Elevation _____

_____ Ft N of SL. Depth to bedrock _____

_____ Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

WATER WELL LOG

FORMATIONS (Color, type of material, hardness, etc.)

To

From

100

0

100

100

clay
sand

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46204
Telephone 633-5267 Area Code 317

20

WATER WELL RECORD

Permit # 17.5

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled: Ex. 9 2 line Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

Ex. 9 2 line

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner Ex. 9 2 line Address _____

Building Contractor _____ Address 5410 N. Michigan St.

Name of Well Drilling Contractor: Hunter & Sons Inc.

Address _____

Name of Drilling Equipment Operator: J. H. H.

WELL INFORMATION

Depth of well: 175' Date well was completed: 12-1

Diameter of casing or drive pipe: _____ Total Length: _____

Diameter of liner (if used): _____ Total Length: _____

Diameter of Screen: 12" Length: 2' Slot Size: 1/16"

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☐ Rotary ☒ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) _____ feet

Bailer Test: Hours Tested _____ Rate _____ g.p.m. _____ Drawdown _____ ft.

Pumping Test: Hours Tested 2 Rate 1.1 g.p.m. 175' Drawdown _____ ft.

(Drawdown is the difference between static level and water level at end of test)

Signature T. H. H.

Date 1-2-72

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

Subdivision Name

Zionsville & Carmel 72

5/30/74

Date _____

Location accepted w/o verification by

Aquifer elevation

Lot Number

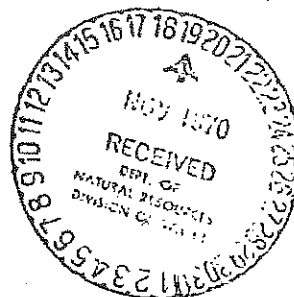
-219-

FORMATIONS (Color, type of material, hardness, etc.)

NOTES

DIVISION OF WATER
DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA
STATE OFFICE BUILDING
INDIANAPOLIS, INDIANA 46209

WATER WELL RECORD



INFORMATION ON WELL LOCATION

Ex. 9 4 lines redacted

Name of Well Drilling Contractor: ED SHERLOCK DRILLING CO.

Address: 5709 RAHKE RD. INDIANAPOLIS IND 46217

Name of Drilling Equipment Operator: ED SHERLOCK

INFORMATION ON THE WELL

Completed depth of well: 95 ft. Date well was completed: SEPT 70

Diameter of outside casing or drive pipe: 4 Length: 92

Diameter of inside casing or liner: _____ Length: _____

Diameter of Screen: 3 1/2" Length: 50 Slot size: #60

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For home ☒ For industry ☒ For public supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Driven ☐

Static water level in completed well (Distance from ground to water level) 50 ft.

Bailer Test: Hours tested 2 Rate 6 g.p.m. Drawdown 38 ft. (Difference between static level and water level at end of test)

Pumping Test: Hours tested 5 Rate 6 g.p.m. Drawdown 38 ft. level at end of test)

Signature Ed Sherlock

Date OCT 70

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

INSTRUCTIONS

This Water Well Record form is designed to record the most essential data concerning a water well. We request that you be as accurate as possible in recording this information as it may be of great assistance in the planning and development of new water supplies. An accurate location of the well is equally as important as an accurate well log. Please include all information possible in the space provided for well location. As specified in Chapter 6 of the Acts of 1959, a copy of this report must be submitted within thirty days after the completion of a well to the Division of Water.

WATER WELL RECORD

WELL LOCATION

(Fill in completely - Refer to instruction sheet)

County in which well was drilled Ex. 9 2 line Civil Township _____
Driving directions to the well location: Include County Road Names, Numbers, Subdivision Name, lot number, distinctive landmarks, etc.

Ex. 9 4 lines redacted

NAME OF WELL OWNER and/or BUILDING CONTRACTOR

Well Owner Ex. 9 2 line Address _____

Building Contractor Ex. 9 2 line Address _____

Name of Well Drilling Contractor: Ex. 9 2 line

Address Ex. 9 2 line

Name of Drilling Equipment Operator: Ex. 9 2 line

WELL INFORMATION

Depth of well: 10' 5"

Date well was completed: 9-10-72

Diameter of casing or drive pipe: 14"

Total Length: _____

Diameter of liner (if used): _____

Total Length: _____

Diameter of Screen: 3" Length: 15'

Slot Size: _____

Type of Well: Drilled ☒ Gravel Pack ☐ Driven ☐ Other _____

Use of Well: For Home ☐ For Industry ☒ For Public Supply ☐ Stock ☐

Method of Drilling: Cable Tools ☒ Rotary ☐ Rev. Rotary ☐ Jet ☐ Bucket Rig ☐

Static water level in completed well (Distance from ground to water level) 10' 5" feet

Bailer Test: Hours Tested 1 Rate 100 g.p.m. 10 Drawdown 1' 5" ft.

(Drawdown is the difference between static level and water level at end of test)

Pumping Test: Hours Tested 1 Rate 600 g.p.m. 10 Drawdown 5 ft.

Set pump to

Signature Ex. 9 2 line

Date 10-2-72

FOR WELL LOG SPACE USE REVERSE SIDE OF THIS SHEET

COUNTY INDIAN TWP. 17N RGE. 2E 1/4 1/4 SEC. 13 Subdivision Name _____

Topo Map ZIONSVILLE 74 _____

Field Located By _____ Date _____

Courthouse Location By BO 2/3 Date _____

Location accepted w/o verification by 2/3 _____

_____ Ft W of EL. Ground Elevation _____

_____ Ft N of SL. Depth to bedrock _____

_____ Ft E of WL. Bedrock elevation _____

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

[illegible]

Shell #7

_____ Ft S of NL. Aquifer elevation _____ Lot Number _____

330	N.L.	;	175	E.L.
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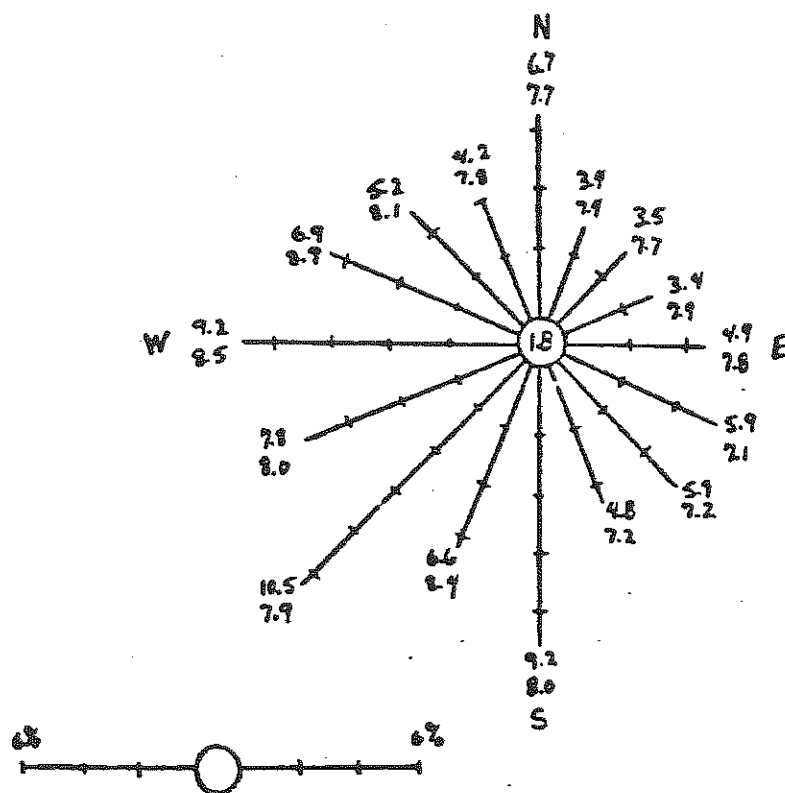
WATER WELL LOG

INCORPORATED
MISHAWAKA, INDIANA

[illegible]

(SKETCH OF LOCATION ON BACK OF THIS LOG SHEET)

APPENDIX N



Annual Wind Rose for Indianapolis, Indiana based on data collected at Weir Cook Municipal Airport. Provided by the National Oceanic and Atmospheric Administration.

Top number is the percentage of observations having the indicated wind direction. Bottom number is the average wind speed (mph) when blowing from the indicated direction. Number in circle is the percent calm. Period of record is from 1965-74; number of observations is 29,216.

